COLLEGE OF HUMAN ECOLOGY

ADMINISTRATION

Lisa Staiano-Coico, dean

Alan Mathios, associate dean

S. Kay Obendorf, associate dean

Brenda Bricker, director, undergraduate affairs

Darryl Scott, director, admission, student, and career development

Tracey L. Thompson, college registrar

COLLEGE FOCUS

The College of Human Ecology anticipates and responds to human needs in the areas of nutrition and health, economic and social well-being, environmental design and technology; as well as human development through education, basic and applied research, and the extension of knowledge. The college is distinctively characterized by the quality of its research in the natural and social sciences and the design arts, a global perspective in academic programs, a preventive approach to contemporary societal problems, multi-disciplinary departments and programs, development of leadership in students and citizens, and a commitment to diverse populations. Faculty and students examine individuals in relation to their family, neighborhood, workplace, and community, seeking a balance between theory and practice that will improve the quality of everyday life.

FACILITIES

The college is housed in Martha Van Rensselaer (MVR), Savage, and Kinzelberg Halls. The buildings include administrative and faculty offices, classrooms, auditoriums, galleries, and lecture halls; wet chemistry and biochemistry laboratories for nutrition, food science, and textile science; experimental food laboratories; design studios and computer-aided design laboratories; woodworking shops; experimental observation rooms with one-way vision screens and sound-recording equipment; human factors and infant research facilities; and an audiovisual classroom for distance learning. Also included are learning resource centers for career planning, field and international study, a historical costume collection, a human metabolic research unit, an animal research facility, cold rooms, a constant temperature and humidity laboratory, and an early childhood research and care program.

Specialized equipment for teaching and research includes biochemical and chemical instruments for spectroscopy, chromatography, radioisotope analysis, electrophoresis, microscopy, and ultracentrifugation; physical testing equipment; and cameras, videotape, and sound recording equipment.

DEGREE PROGRAMS

Cornell programs in Human Ecology lead to the degrees of bachelor of science (B.S.), master of arts (M.A.), master of science (M.S.), master of professional studies in human ecology (M.P.S.), master of health administration (M.H.A.), and doctor of philosophy (Ph.D.).

General academic information concerning the bachelor of science degree is given here under "Undergraduate Study." Curricula for major studies are described under the various academic areas.

Programs leading to master and doctoral degrees are administered by the Graduate School. They are described in the *Announcement of the Graduate School* and in announcements published by the individual field offices (Design and Environmental Analysis, Human Development, Nutritional Sciences, Policy Analysis and Management, and Fiber Science & Apparel Design). For information regarding the Sloan Program in Health Services Administration, contact the Department of Policy Analysis and Management.

UNDERGRADUATE DEGREES

Bachelor of science (B.S.) degrees are offered in the following areas:

Biology and society

Design and environmental analysis

Fiber science & apparel design

Human biology, health, and society

Human development

Individual curriculum

Nutritional sciences

Policy analysis and management

UNDERGRADUATE AFFAIRS

Persons interested in undergraduate study in human ecology should contact the admissions office, 170 MVR (255-5471). Those interested in graduate study should contact the graduate field representative identified among the faculty of each department. Department faculty members are listed at the beginning of the course descriptions for each department.

Counselors in the Office of Admission, Student, and Career Development (172 MVR) can help prospective students understand college programs and requirements, as well as college and university resources and services. They provide a broad range of career services and personal support for all matriculated undergraduates. The college registrar and degree auditor (146 MVR) assists undergraduates with questions about academic credit and graduation requirements.

The Student Body

The College of Human Ecology undergraduate enrollment is 1,200. Roughly 400 students graduate each year; last year 275 freshmen and 115 transfer students matriculated. Ninety faculty members serve as advisors to undergraduates.

The college's undergraduate admissions committee selects applicants who are academically well prepared and appear most likely to profit from the college's various curricula. Admission is highly selective. Approximately two-thirds of the student body comes from New York State, with the remainder coming from other parts of the United States and abroad. In 2005, 30 percent were identified as members of minority groups. Members of the college faculty chair the special committees of approximately 200 graduate students.

Mature Students

The college recognizes that students who interrupted their formal education and are returning to school have needs different from those of younger undergraduates. To facilitate the education of mature students, defined as those 24 years old or older at first matriculation, the college has adopted certain procedures specifically for that group. Counselors in the Office of Admission, Student, and Career Development (172 MVR) can provide information of interest to mature students. Mature students are permitted to enroll for as few as 6 credits without petitioning for permission and also are permitted to extend their residency beyond the normal eight semesters. To find out about qualifying for prorated tuition, mature students must see the college registrar during the course enrollment period in the preceding semester.

Special Students

Students eligible for special status are those visiting from other institutions and interested in particular programs in the college, those with a bachelor's degree who are preparing for graduate study or jobs and careers in human ecology–related fields, or those who have interrupted their education and are considering completing degree programs. Students accepted in the nondegree status of special student may enroll for a maximum of two semesters. During the second semester of attendance, a special student must either apply for admission as a transfer student or plan to terminate studies in the college at the end of the semester. Special students are expected to take a minimum of 12 credits each semester and to take one-half to two-thirds of their work in the statutory divisions of the university. Courses taken while a person is classified as a special student may be counted toward the requirements of the bachelor's degree. Those interested in becoming special students should make appointments to discuss admissions procedures in the Office of Admission (170 MVR, 255-5471).

Empire State Students

Occasionally a student who is completing requirements for a degree through the Empire State College Program is interested in taking a human ecology course. This can be done by registering through the Division of Summer Session, Extramural Study, and Related Programs (B20 Day Hall, 255-4987). All rules of the extramural division apply, and registrations will be accepted only on a space-available basis and with the written approval of the course instructor. At the time of registration, Empire State College students must provide the extramural division with a completed copy of Empire State College's notification of cross-registration (form number SA-22, F-031) to verify enrollment in Empire State College. Such students will be charged 25 percent of the standard extramural tuition per credit.

Transfer Students

Students may be considered transfer students once they complete 12 college credits after high school graduation. An external transfer student is one who transfers to Human Ecology from an institution outside of Cornell University. Liberal arts credits from other institutions transfer readily, but students must earn a minimum of 60 Cornell credits to graduate. Internal transfer students are admitted to Human Ecology from one of Cornell's other six undergraduate units. Students transferring internally should take special care to learn the policies of Human Ecology, because rules at the various Cornell colleges often differ. Before admission, both internal and external transfer candidates should contact the Office of Admission (170 MVR, 255-5471) to discuss credit transfer. Upon matriculation, admitted transfer students should attend the orientation and contact the Human Ecology registrar's office (146 MVR, 255-2235) to discuss how transfer credits will apply to their specific degree program.

MAJORS

The college requires students to fulfill requirements for a major to graduate. Students must declare a major by the end of the sophomore year. It is common for students to change interests during their undergraduate careers. Counselors in the Office of Admission, Student, and Career Development (172 MVR), academic advisors, and directors of undergraduate study in each of the academic departments can help students to consider their options and engage in academic planning. All changes of major require submission of the change of major form and are processed through the college registrar's office, 146 MVR. Change of major will trigger re-evaluation of all academic credit and assignment of a new faculty advisor.

DESIGN AND ENVIRONMENTAL ANALYSIS

The Department of Design and Environmental Analysis (DEA) is concerned with planning, designing, and managing the built environment and its effects on human behavior, experience, and the environment itself. The processes for creating, managing, and maintaining the built environment, and the implications for how we live our lives face enormous challenges. These include frequent social and organizational change, technological advances, new building methods, and finite resources. The program in DEA is dedicated to preparing graduates who can help individuals, groups, and organizations meet these challenges.

Diverse faculty backgrounds and teaching approaches help students to develop multidisciplinary problem-solving and creative abilities, aesthetic judgment, and analytical thinking. Students explore innovative concepts for the design and management of interior environments through laboratory, shop, studio, and computer facilities. The relationship between people and their physical surroundings is explored through a combination of academic courses, field experience, and applied research. Examples of student class projects and faculty work are frequently on display in the MVR gallery. The DEA resource center includes books, journals, newsletters, and material samples for student use.

Options

The department offers undergraduate education in three areas: interior design, facility planning and management, and human factors and ergonomics. The interior design option is nationally accredited by the Council for Interior Design Accreditation (CIDA). The Facility Planning and Management Program at Cornell is an IFMA Recognized Program. This means that it meets the standards for recognition of programs established by the International Facility Management Association.

To take full advantage of the course sequences and electives, it is important to select an option as early as possible. This is particularly true in the interior design option. Transfer students in the interior design option should plan on a minimum of six semesters at Cornell to complete the program.

Option I: Interior Design

This option prepares students for professional careers in interior design. The program emphasizes a design process in which innovative solutions are based on research-derived knowledge of human behavior, values, and attitudes. Students develop an understanding of design theory and methods, design history, behaviorally based programming, and post-occupancy evaluation. They learn about design communication, building systems, furnishings, materials and finishes, and professional practice. Students may use their elective courses to develop a specialization in areas such as design history, historic preservation, theory and criticism, design leadership, interactive multimedia, design sustainability, and behavior-based design.

This program also serves as an excellent preparation for graduate study in interior design, facility management, architecture, and industrial design.

Option II: Facility Planning and Management

This option prepares students for professional careers in facility management. The program focuses on the planning, design, and management of facilities for large, complex organizations such as corporations, health care institutions, research and development laboratories, and universities. Facility planning and management is a basic management function that coordinates and integrates information and expertise from areas such as planning and design, real estate, and business administration with human factors, ergonomics, environmental psychology, telecommunications, and building operations for the purpose of developing and managing facilities that support individual and organizational effectiveness.

Excellent career opportunities exist in the facility management divisions of private companies, institutions, the health care industry, and with private consulting firms offering facility management services. The program is also a good preparation for graduate study in business, planning, or one of the design disciplines and for advanced study in facility planning and management.

Option III: Human Factors and Ergonomics

This option focuses on the interaction between people and their physical surroundings. The program seeks to expand understanding of how the environment affects human perception, cognition, motivation, performance, health, safety, and social behavior. This knowledge is then used to help architects, planners, interior and product designers, and facility managers to plan, design, and manage safe and effective environments. The effect of human capabilities or characteristics such as family structure, life-style, social class, and stage-in-life cycle on environmental needs and requirements is also a focus of the program. Career opportunities are available in design firms and in urban planning and other public agencies as well as in the facility management and product design division of private companies. Human factors and ergonomics is good preparation for graduate study leading to a Ph.D. degree in the social sciences and a career in academic or other research-oriented settings in either the public or private sector. It can also serve as the basis for graduate study in an environmental planning or design discipline such as architecture, facility planning and management, interior design, landscape architecture, or city and regional planning. Electives in the social sciences and in research methods and statistics are encouraged.

Academic Advising

All DEA majors are matched with a faculty advisor during their first semester by the director of undergraduate studies, Associate Professor Kathleen Gibson, E204 MVR.

Consultation with faculty advisors about future goals, departmental requirements, sequences of courses, and electives inside or outside the college helps students develop their programs. Students majoring in interior design, especially, must begin early to plan and collect materials for a portfolio of their work, which is necessary for many positions and for application to graduate schools. Faculty advisors can make recommendations on what to include. Students are free to change advisors. Although advisors must approve students' schedules during course enrollment each semester, it is the student's responsibility to keep track of his or her courses and to make sure that they meet graduation requirements for their major and college.

Ownership and Exhibition of Student Work

All design work done in studios as part of an academic program is the property of the department until it has been released by the instructor. The department is not responsible for loss or theft of student work.

FIBER SCIENCE & APPAREL DESIGN

The Department of Fiber Science & Apparel Design (FSAD) focuses on the use of textiles and fibrous materials for apparel, composites, biomaterials, residential and contract interiors, geotechnical and other applications. Programs in the department, in keeping with the overall mission of the college, emphasize the use of materials to meet human needs. The undergraduate curriculum focuses on the development of design skills, an understanding of the properties of textile materials, knowledge of marketing, and the use of technology in the industry.

Practical problem-solving skills are developed in the department's studios and laboratories. Academic course work is further enhanced by field and international experiences. Gallery space provides the setting to display design work. In addition, the Cornell University Costume Collection, housed in the department, provides a valuable resource; items from the collection are made available to students for classroom and special study use.

Academic Advising

All FSAD majors are matched with a faculty advisor by the director of undergraduate studies, Professor Nancy Breen, 205 MVR. Students are strongly urged to discuss their goals, course selection and sequence, electives, and career plans with their faculty advisor. Students in apparel design must begin working with their advisors early to develop a professional portfolio of their work. Students are free to change advisors; changes must be recorded with the director of undergraduate studies. Although advisors must provide the PIN number to lock in courses during course enrollment each semester, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for his or her major and college.

Ownership and Exhibition of Student Work

All apparel design work done as part of the academic program is the property of the department until it has been released by the instructor. Certain exceptional work may be retained by the department to exhibit for academic purposes. The department is not responsible for the loss or theft of student work.

Course Fees

No grade will be given in a course unless the course fee has been paid and equipment returned by the last week of classes.

Options

Students may select options in apparel design, apparel/textile management, or fiber science. The curriculum is based on manipulation of form, color, and the physical characteristics and structures of fabric to solve aesthetic and functional apparel problems; the application of economic and marketing principles to consumer and industry problems in the textile-apparel sector; and the study of chemical, physical, and engineering properties of fibrous structures and polymers. Most transfer students will need at least one extra semester to fulfill the requirements of the major. Transfers in the design option should plan on two additional semesters.

Option I: Apparel Design

The apparel design major integrates design, technology, physical sciences, the humanities, and social sciences in the study of clothing, its materials, and its functions. Using a problem-solving approach, the design process is studied and applied in the creation and critique of fashion and functional apparel. The relationships between dress and human behavior, aesthetics, and fashion are studied within the context of the meaning of dress. The materials and technologies used in apparel design and the product interface with the consumer are also integral to the major. The themes of technological innovation, cultural transmission, innovation by consumers and designer, and geopolitical change are stressed as topics of engagement.

Option II: Apparel/Textile Management

Apparel and textile management combines the fields of apparel and textiles with those of economics, business management, and organizational policy. Students combine theory with case studies to find solutions to everyday problems. Course work is drawn from many interrelated disciplines, including textiles, apparel, product development, economics, business management, and communication, as well as practical field experiences. This provides students with the experience of working with professionals from a wide variety of disciplines. Students often combine this option with either Option I (apparel design) or III (fiber science).

Option III: Fiber Science

Applications for textile structures include advanced engineering composites, protective clothing for industrial and military environments, and biomedical materials, as well as the more traditional applications found in apparel and home furnishings. The fiber science option provides a strong base in mathematics and the physical sciences combined with supporting courses in engineering, consumer economics, and the social sciences.

Career Opportunities

Graduates of programs in the Department of Fiber Science & Apparel Design have found challenging employment within the textile and apparel sector, in independent and government-sponsored research, and in community organizations. Recent graduates are working in the fields of design, management, new product development, engineering, communications, and marketing. In addition, the program prepares students for graduate or professional study in fiber and polymer science, textile marketing, apparel design, textiles, or business and management.

HUMAN BIOLOGY, HEALTH, AND SOCIETY

The human biology, health, and society (HBHS) program permits students to combine their interests in the biological sciences while exploring human health issues from the perspectives of both the biological and behavioral sciences. HBHS majors select the issues they want to explore in depth from Human Ecology courses that address health and the broad range of factors that influence human well-being. Issues that can be explored include biology and behavior; metabolism, genetics, and health; biology, growth, and development; and food and health policy and health promotion. Most students in this program will proceed to programs of advanced study to pursue careers related to health. This major is offered by faculty in the Division of Nutritional Sciences. More information about this program can be found in a separate section of the catalog that describes the division's programs.

HUMAN DEVELOPMENT

Human development majors explore the psychological, social, cultural, and biological development of people from conception to old age, focusing on the processes and mechanisms of growth and change over the life course. A wide range of issues are included in the study of human development, including biological, cognitive, and emotional development; the role of family, neighborhood, workplace, and culture in development; and the influence that developing humans have on their environment. The human development major provides an excellent foundation for many careers, such as medicine (particularly family medicine, pediatrics, and psychiatry), clinical psychology and other mental health professions, law, business (especially human resources), child and family advocacy, and education (from preschool and elementary school teaching to school administration). The major prepares students for academic careers as professors in human development, psychology, or sociology departments. Learning about human development also helps students understand more clearly their own development and the development of those around them.

The faculty of the Department of Human Development comes from several disciplines, including developmental and clinical psychology, sociology, and education. The diversity of faculty expertise results in a wide-ranging view of human development. The research of the department's faculty is extensive. It includes basic research on issues such as the neurobiology of personality, the role of childhood attachments in the development of adult romantic relationships, the acquisition of language in infants, and the effects of environmental stressors on children's cognitive development. It also includes applied research useful for the creation of public policy, such as studies of the causes and consequences of child maltreatment and studies of the effectiveness of reading programs for Head Start preschoolers, apprenticeship programs for high school students, and support programs for aging adults in community and congregate settings.

Curriculum

Human development is the most flexible major in the College of Human Ecology. While all students learn the fundamentals of human development, each student can focus on one or more areas of particular interest. The flexibility of the major also allows students ample opportunity to meet the requirements for admission to many professional schools, including medical, dental, law, and business schools.

Requirements specified by the College of Human Ecology make up part of each student's curriculum, and include classes in the social and natural sciences, humanities, writing, and communication. In addition, there are requirements for the human development major. Students in this major can choose up to 14 elective courses from the broad range of offerings across the Cornell campus.

Special Opportunities

Beyond formal course work, students have many other opportunities that involve ongoing individual work with Cornell faculty or other professionals. Academic credit can be earned through all of them. These opportunities include the following:

Field Placements. Human development majors can arrange internships with Urban Semester in New York City, Cornell in Washington, and Cornell Abroad programs and in local agencies. These have included hospitals, psychiatric hospitals, juvenile detention centers, senior housing, and the department's on-campus Early Childhood Program. Students have also participated in projects with the Tompkins County Office of Aging, the Tompkins County Youth Bureau, and the Law Guardian's Office of Tompkins County.

Faculty Research. Many students work as research assistants on faculty projects. Students use research techniques ranging from laboratory procedures to family observations to large surveys. They assist in study design, data collection, and data analysis. Participation in faculty research provides the type of experience that many graduate and professional schools expect from their top applicants. Recent projects have included the study of parent-infant interactions, the transition of high school students into the world of work, evaluation of pre-kindergarten programs, and the impact of poverty on stress responses in children and teens.

Independent Research. Under faculty supervision, some advanced students complete an honors thesis in an area of personal interest by designing a study and collecting and analyzing data. Recent thesis topics have included development in families that adopt school-age children, connections between speed of visual processing in infants and later scores on intelligence tests, ethnic variation in exposure to stressors in adolescence, and the relationship of religious beliefs to well-being.

Undergraduate Teaching Assistant. Advanced students can serve as undergraduate teaching assistants. This requires close work with the professor teaching the course as well as with students taking the course.

Teaching Certification. A cooperative education program exists between the Department of Human Development and Wells College. This program requires careful planning and course scheduling. It enables students to graduate with a Cornell bachelor's degree and New York State Certification to teach nursery school through sixth grade. This certification is honored by most other states.

The program requires a minimum of a three-semester commitment. Cornell HD students take four courses at Wells College and student teach their last semester at Cornell. Although there is van transportation between Cornell and Wells College, it is important for students to have access to a car, especially while student teaching. Students will be registered at Cornell during the entire undergraduate program and usually maintain Ithaca housing. Wells College courses count as Cornell courses and are used as electives but are not included in a student's GPA. The one-semester student teaching experience is typically based in the Ithaca area, though not necessarily within the city of Ithaca.

This program is open to HD majors only. Students must have at least a 3.0 Cornell cumulative GPA upon application and must maintain a 3.0 GPA to qualify for student teaching and to complete the program. For more information, contact Judith Ross-Bernstein in G56 MVR at 255-0826.

NUTRITIONAL SCIENCES

A major in nutritional sciences (NS) focuses on the complex interrelationships of food patterns, nutritional status, and health. This field draws upon chemistry, biology, and the social sciences to understand questions such as: How are nutrients used by the body? What factors influence human food choice? What nutrients and dietary patterns are recommended to promote growth, maintain health, or reduce the risk of chronic disease? Students in this program may also fulfill the courses required for didactic training in dietetics toward registration as a dietitian (R.D.), which will enable them to be employed as nutrition counselors, clinical nutritionists, sports nutritionists, or administrators of food and nutrition services. Students also may prepare for medical school and other types of advanced degree programs through this major. The requirements for this program are outlined in the "Nutritional Sciences" section of this catalog.

Special Opportunities

Dietetics and Clinical Nutrition

Interested students should complete the academic requirements for the didactic program in Dietetics, approved by The American Dietetic Association (ADA). Courses in foods, nutrition and disease, microbiology, management, statistics, and economics are added to the core curriculum (specific requirements). Evaluation of academic credentials to qualify for a dietetic internship should be completed before graduation. Seniors should initiate this academic evaluation process in March if they will graduate in January or in September if they will graduate in May. All students who will complete the academic requirements by graduation should participate in the evaluation process while at Cornell. Students who meet most but not all of the academic requirements are encouraged to have their academic work evaluated while they are at Cornell so that deficiencies can be identified and documented.

Advisors in the dietetics program can also help students plan to meet the experience or supervised practice component required for active membership and/or eligibility to take the Registration Examination to be registered as a dietitian (R.D.). For additional information about meeting ADA requirements, contact the DNS academic affairs office, B21 Savage Hall, 255-4410.

Exercise Science Minor

Students can complete the applied exercise science concentration at Ithaca College, which includes courses in fitness measurements, exercise physiology, and biomechanics of human movement. Nutrition courses of special interest relate to growth and development, regulation of body weight, and community nutrition and health. For information about the applied exercise science concentration, contact the DNS academic affairs office, B21 Savage Hall, 255-4410.

POLICY ANALYSIS AND MANAGEMENT

The policy analysis and management (PAM) major produces graduates skilled in policy analysis and management skills applicable to the public, nonprofit, and private sectors. The PAM graduate will have concentrated knowledge in one of three policy areas: family/social welfare, health, or market regulation. Graduates are well-qualified for a wide variety of public, not-for-profit, and private sector employment emphasizing either policy analysis or managerial decision making. The major also attracts large numbers of pre-law students, pre-M.B.A. students, and students intending to pursue graduate studies in economics, sociology, and public policy programs. The potential exists to pursue a five-year program resulting in a B.S. and a Master of Health Administration.

The PAM major combines theoretical underpinnings from economics, sociology, psychology, demography, and government to critique and analyze U.S. domestic policies and programs. It also gives students the knowledge to build management skills for use in public, not-for-profit, and for-profit settings. Ideas of social justice, equity, and economic efficiency will be studied. Research methods, statistics, and planning concepts will be taught and applied to program planning, policy analysis, and management.

In addition to learning basic policy analysis and management skills, the student will be expected to apply these skills within a particular concentration area—family/social welfare, health, or market regulation. Family/social welfare courses cover a panoply of governmental and private sector income maintenance, social, and human service delivery programs and policies that range from child adoption, neglect, and abuse policies and antipoverty programs to policies and programs that impinge on or regulate marriage, divorce, and fertility. Health courses cover politically sensitive programs and issues such as health care access, Medicare, Medicaid, long-term care, managed care, public health issues, and substance abuse policies. Market regulation courses cover programs and policies governing advertising,

corporations, product safety, food and drug safety, nutrition policies, consumer credit, insurance, telecommunications, housing, and public utility markets. They also deal with issues such as privacy, the Internet, and television.

In addition to meeting college requirements, all PAM majors are expected to take the following core courses: Introductory and Intermediate Policy Analysis, Research Methods, Multivariate Statistics, Intermediate Microeconomics, and Public Sector Economics. Research Methods, Multivariate Statistics, and Intermediate Microeconomics must be completed by the second semester of the sophomore year. Students also will be expected to develop a concentration of four courses in either family/social welfare, health, or market regulation. Please check with the undergraduate advising coordinator, Professor Rick Geddes, for further details.

PAM Honors Program

The honors program, which leads to a B.S. degree with honors in Policy Analysis and Management, gives official recognition to students who have demonstrated excellence in their academic work and their capacity for independent study. In addition to fulfilling requirements for the major, students in the honors program will participate in an honors seminar (PAM 498) and prepare an honors thesis. Students work with a research mentor in preparing their thesis. Interested students should obtain a PAM Honors Program application form from the PAM Undergraduate Office (122 MVR). This form should be completed no later than the second semester of their junior year. For more information, students should contact Professor Rick Geddes.

INTERDEPARTMENTAL MAJOR IN BIOLOGY AND SOCIETY

Biology and society is a multidisciplinary program for students with special interests in such problems as genetic engineering, environmental quality, food and population, the right to medical care, and the relation between biology, society, and ethics and/or public policy. It is also designed for students who plan postgraduate study in management, health, medicine, law, or other related fields.

Because the biology and society major is multidisciplinary, students must attain a basic understanding of each of the several disciplines it comprises, by including courses in the fields of biology, humanities, social sciences, and mathematics. In addition, majors take core courses in biology and society, a set of electives, and a special senior seminar.

Course work in the College of Human Ecology may be selected from concentrations in human development, health, or social policy and human services. The other basic requirements of the college must also be met. Programs incorporating those required courses are designed in consultation with a faculty advisor to accommodate each student's individual goals and interests. For further information on the major, including courses of related interest, specific course requirements, and application procedures, see Nancy Breen, director of undergraduate studies, in 205 MVR.

INDIVIDUAL CURRICULUM

A student who has educational and professional objectives that cannot be met satisfactorily within the framework of existing majors in the College of Human Ecology may petition to develop an individual curriculum. To be approved, the curriculum must be within the focus of the college and be interdisciplinary in design, include at least 40 credits in human ecology courses, and not exceed the normal number of credits allowed in the endowed divisions. A student develops an individual curriculum in consultation with faculty advisors from at least two subject matter fields and the program coordinator, Patti Papapietro, Office of Admission, Student and Career Development (172 MVR).

Such a program of study should encompass a substantial part of the student's undergraduate education and must include at least three semesters. For this reason, a request to follow an individual curriculum should be made after the freshman year and must be made before the second semester of the junior year.

If an individual curriculum seems advisable, the individual curriculum coordinator will provide direction in developing a formal program of study. Although the coordinator must approve the course enrollment schedule during the course enrollment period each semester, it is the student's responsibility to follow the curriculum as planned or to have any necessary revision approved in writing by his or her advisor and the program coordinator before the program changes are made.

SPECIAL OPPORTUNITIES

Study Abroad

Each year over 75 Human Ecology students spend a semester or more off campus in places spanning the globe, such as Australia and Zaire. There they supplement their Cornell studies with a wide range of cross-cultural and academic experiences. Study abroad opportunities are available through Cornell-sponsored programs and other U.S. college–sponsored programs as well as by direct enrollment at foreign universities.

Residency Requirements

All study abroad students must meet college study abroad requirements and remain registered at Cornell during the overseas study. Credits earned count toward the 60 Cornell credits required for graduation (in unusual circumstances some credits earned abroad may be considered as transfer credit). Study abroad credits do not count toward the maximum number of endowed credits that Human Ecology students are permitted to earn.

Requirements for College Approval

1. GPA of 3.0 or higher, good academic standing, and well-articulated goals for students' study abroad semester.
2. Completion of the Cornell application; applications from individual programs also must be submitted to Cornell.
3. Completion of the equivalent of 15 semester credits per semester while abroad.
4. Courses taken for a letter grade (unless course is offered with only an S-U option).
5. Submission of a petition by second-semester seniors going abroad.

Application Process

Typically, students considering study abroad begin their planning at least a year before the semester abroad. Students should carefully consider what they hope to get out of a study abroad experience (academically and culturally) when investigating program options. Resources can be found in the Cornell Abroad office (300 Caldwell Hall), through the Human Ecology study abroad advisor (170 MVR), or in the Human Ecology Career Development Center (162 MVR). Applications may be found through these resources or in the Human Ecology registrar's office (146 MVR). Completed applications must be submitted to the Human Ecology registrar's office by the following dates:

Fall and year deadlines: February 1

Spring deadline: September 15

Some programs will be filled by these dates. Use of the early deadlines is strongly recommended. These are:

Fall and year deadlines: December 15

Spring deadline: May 1

Approved applications will be signed and forwarded to the respective programs through the Cornell Abroad office.

Credits Abroad and Transfer of Credit

Most study abroad courses are transferred to the Cornell degree program as electives or liberal arts distribution credit. Study abroad credit awarded toward one's major is much less common and must be approved via signature of the student's department advising coordinator on the Cornell application. Credit for study abroad will be awarded only after successful completion of the semester abroad (marks equivalent to a Cornell grade of C or higher) and receipt of the official transcript by the college. Official transcripts should be sent to the Cornell Abroad office, which will process and forward them to the Human Ecology registrar.

Courses must be pre-approved before the student's departure. Any variances must be cleared with Human Ecology. Students must include a foreign language course in the country's native language if studying in a country where English is not the native language. All courses taken abroad and grades received will appear on the Cornell transcript. Grades earned do not, however, become part of the Cornell GPA. Students should save all written work from all classes until courses are officially transferred.

Independent Research

Research opportunities for undergraduates are extensive and valued as an important part of the learning experience. The opportunity to engage in substantive research with some of the leading scientists in their fields is so compelling that approximately half of the college's undergraduates conduct research projects. Students may become involved in research with the guidance of faculty members by conducting research assigned in a class, joining a faculty member's research group, completing an independent study research

project, or carrying out an honors program project.

For further information, students should contact individual faculty members or the director of undergraduate studies (DUS) in their department.

Honors Programs

Students interested in college honors programs that lead to the degree "bachelor of science with honors" usually apply to the appropriate honors committee no later than the end of the first semester of their junior year. A minimum GPA of 3.3 and demonstrated potential for honors-level research is required. Students take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and defend it in an oral examination.

In addition to the college honors program, special programs are offered by the Department of Human Development, the Department of Policy Analysis and Management, and the Division of Nutritional Sciences.

Students who are interested in the honors program should contact the director of undergraduate studies (DUS) in their department or division for information and guidelines.

Field Study and Internships

Field study and internships provide experiential learning opportunities in real-life circumstances where classroom knowledge is tested and applied. Students are able to master new skills, develop and implement plans of action, solve problems, interact in multicultural situations, and build networks for future job opportunities. By applying techniques of research methods, critical thinking, and self-directed learning, students learn to think conceptually while becoming agents of change.

Check with the director of undergraduate studies for major specific information. The Career Development Center (162 MVR) and career counselors in 172 MVR also can provide resources and assistance in finding internships and other experiential opportunities.

Concentration/Certificate in Gerontology

For students interested in pursuing study related to aging, the College of Human Ecology, under the auspices of the Bronfenbrenner Life Course Center, offers the option of completing an undergraduate concentration in gerontology. This program is designed to develop an understanding of and competence in dealing with the processes and issues of aging. Study in gerontology enriches the practical experience of students and prepares them for professional work in this area. The program draws on the resources of several departments and colleges at Cornell and Ithaca College to shape a curriculum suited to each student's professional goals and interests.

The concentration is available in combination with any major offered by the university. Twelve credit hours of course work must be completed, with 9 of these taken in the College of Human Ecology. The courses explore aging through biology, psychology, sociology, economics, and design.

Experiential learning opportunities are strongly recommended as a complement to classroom work. With faculty sponsorship, students can participate in experiences in the Ithaca area, the Urban Semester in New York City, Cornell in Washington, the Capital Semester, or in a placement arranged more individually.

Both Cornell and Ithaca College offer courses that incorporate a service-learning component into their curriculum. Cornell's course Environments for Elders (DEA 472) involves service in local agencies (e.g., local nursing homes, Office of Aging, assisted-living facilities), where students gain valuable experience. Students may also join the "Elderly Partnership" through the Cornell Public Service Center to participate in local visits to elders. There also are opportunities for undergraduates to become involved in research projects examining topics such as residential changes and adjustments in the later years, nutrition and elders, social security, and design for people with dementia. In addition, senior students can apply to work as a teaching assistant for a gerontology course.

Departments and programs have designated academic advisors for the gerontology concentration who will help students plan the sequences of courses and electives needed to complete both a major and the gerontology concentration. Because many gerontology courses have prerequisites, early and careful planning is essential.

Specific program requirements may be obtained in the Human Ecology registrar's office (146 MVR, 255-2235) or from Nancy Wells, Bronfenbrenner Life Course Center (E220 MVR, 254-6330).

Concentrations

The College of Human Ecology formally recognizes as concentrations computer information sciences and international relations (both administered by the College of Arts and Sciences) and the previously described concentration in gerontology (administered by the College of Human Ecology). The college also offers a minor in education. Students interested in pursuing these concentrations should inquire with the college department offering them. If successfully completed before graduation, these concentrations will be posted as part of the student's official transcript.

Students may develop an unofficial concentration in additional fields taught at Cornell by taking 12 credits in an approved area. Africana studies, communications, and business are just a few examples of concentrations that are possible. While these unofficial concentrations are not part of a student's transcript, students may choose to publicize these concentrations on their personal résumés.

THE URBAN SEMESTER PROGRAM IN NEW YORK CITY

Multicultural Issues in Urban Affairs

Sam Beck, Ph.D., director

The Urban Semester Program is a set of courses spanning the entire year. Students choose either fall or spring semester and enroll in three classes focusing on the opportunities and barriers that a multicultural society presents and their relationship with professional, community, or public policy settings and concerns (15-credit residential program). They also intern three days each week in placements of their choosing. One day each week, students carry out community service in an inner city school (pre-K to high school). One day each week, students participate in site visits. Seminars are incorporated into these activities. All students reside in the Olin Hall dormitory of the Weill Medical College of Cornell University.

In the eight-week summer semester (1 to 2 credits), students carry out internships in various medical settings. Students work with the program staff to locate internship placements. For information, contact the Urban Semester Program staff in 162 MVR, 255-1846, or the Urban Semester Program in New York City at 212-746-2273.

New York City offers a wide variety of internship settings. Many bilingual and bicultural internship settings are available in Chinese, Spanish, Creole, Russian, Yiddish, and other languages. Examples of internships follow:

Health and medicine—New York Presbyterian Hospital/New York Weill Cornell Medical Center, Queens Medical Center for Women and Children, South Bronx Health Center for Children and Families, Memorial Sloan Kettering Hospital, Hospital for Special Surgery, Montifiore Hospital, Bellevue Hospital, Our Lady of Mercy Hospital

Private and public law—NOW Legal Defense and Education Fund, Agenda for Children Tomorrow, Skadden Arps, Slate, Meagher & Flom, Lawyers for Children, DA's Office, Legal Aid Society, AALDEF, Committee Against Anti-Asian Violence, Center for Immigrant Rights, NAACPLDEF, Dorsey & Whitney

Government and community agencies—Cornell University Cooperative Extension, Senator Charles Schumer's office, NYC Housing Authority, Dept. of Aging, Women's Action Alliance, NYC Commission on the Status of Women, NYC Dept. of Consumer Affairs, The Center for Puerto Rican Studies, Manhattan Borough President's office, Central Park Wildlife Center, Attorney General's office, The Parks Dept., Health Dept.

Wall Street firms and other private businesses—Bloomingdales, Prudential Securities, Merrill Lynch, PricewaterhouseCoopers, Cairns & Associates, Burson Marsteller, Cushman & Wakefield, AIG-AI Underwriters, Salomon Smith Barney, Jane Clark Chermayeff Associates, DDB Needham, KCSA, William M. Mercer Consulting Co., MGM, Madison Square Garden, Gensler Architecture, Niedefhoffer-Henkel Century Group, American Management Association

Private not-for-profit organizations—City Lights Youth, Council on Economic Priorities,

Planned Parenthood, Talbot Perkins, FEGS, National Resources Defense Council, Urban Youth Alliance Inc., Phipps Housing, The Door, Covenant House, Global Policy and International Law, UN International Assoc. of Religious Freedom, Mothers and Others for a Livable Planet, UN Child Care Center, WHEDCO, YAI, Families and Work Institute

Private and public schools—Beginning with Children, Banana Kelly High School, East Harlem School at Exodus House, The Hetrick Martin Institute, Nuestros Niños, Theodore Roosevelt High School, The Choir Academy of Harlem, El Puente, Genesis RFK Center, River East School, MS 118, Mott Haven Village

Design and arts organizations—Harlem Textiles Works, TADA!, NY Theater Workshop, Cynthia Rowley, Inc., Perry Ellis International, Museum of African Art, SOHO20 Gallery, Lower East Side Tenement Museum, Tommy Hilfiger, Polo, The Gap, Liz Claiborne

Communications and media—Nickelodeon, *Do Something* magazine, NBC *Dateline*, CNN, CBS News–*48 Hours*, NBC News, ABC *One Life to Live*, MSNBC *The News w/Brian Williams*, *The Village Voice*, *Good Housekeeping*, *The New Yorker*, *Essence*, Children's Television Workshop, *Good Morning America*, MTV, HarperCollins Publishing, *Maxim Magazine*, MTV Online International

Other Off-Campus Programs

Capital Semester

William Rosen, Ph.D., director

Combine a full semester of 15 Cornell credits with a paid internship and a reduction in tuition. Students intern directly for a New York State legislator (Senate or Assembly) in Albany to explore their policy interests in greater depth. Interns attend hearings and legislative sessions, meet with lobbyists and constituents, write reports for legislation and possible publication, and generally help conduct the work of their legislator. All Cornell students, regardless of major, are encouraged to apply. The program is available during the spring semester only, and it is open to sophomores, juniors, and seniors. Interns benefit greatly when subsequently applying for future employment, law school, graduate school, or business school. Information is available from the Career Development Center (162 MVR), and applications and further information can be obtained from William Rosen (259 MVR, wr14@cornell.edu).

Cornell in Washington

Students take courses from Cornell faculty, conduct individual research projects, and work as externs while taking advantage of the rich resources of the nation's capital. For more information, visit the program office (471 Hollister Hall).

Courses at Ithaca College and Wells College

Full-time undergraduate students at Cornell may petition to enroll in courses at Ithaca or Wells College. Students pay regular full tuition to Cornell and only special fees to either Ithaca or Wells where applicable. Students are allowed to register for one course per semester and a maximum of 12 credits in four years. Exceptions will be granted to Cornell students enrolled in methods and practice teaching courses at Ithaca and Wells, and those students pursuing a concentration in exercise science through a specially arranged program with Ithaca College.

Cornell students are eligible to register only for Ithaca and Wells College courses that are relevant to their program and that do not duplicate Cornell courses. Ithaca and Wells College credit counts as Cornell credit but not as Human Ecology credit. Students are accepted on a space-available basis. Participation in this program is not guaranteed, and both Ithaca and Wells have the right to accept or reject students for any reason deemed appropriate. The program is available only during the fall and spring semesters. For further information, contact the college registrar (146 MVR, 255-2235).

Double-Registration Programs

Cornell undergraduates from PAM and other fields across the college and campus are eligible to apply to the Sloan Program in their junior year for a five-year accelerated B.S./M.P.S. degree in health administration. In their senior year, these students will take the first-year Sloan courses, which will be counted twice to satisfy both undergraduate as well as graduate requirements. At the end of their senior year, students will graduate with a B.S. degree. Students whose grades are competitive will be notified during the spring semester of their senior year that they are invited to continue for the final year of Sloan as a graduate student. Those students accepted for the five-year program will participate in a health care administrative internship during the summer after earning their B.S. degree and following the first year of Sloan academic course work. The following graduate year they will complete the second year of required Sloan courses and electives and will earn a master in professional studies, with Cornell certifying completion of the requirements for a graduate degree in health administration.

Students applying to the accelerated M.P.S. program need to complete the initial application to the Sloan five-year program through PAM in their junior year. In general, at the time of application, most of their undergraduate requirements will have been met. This application must include the GRE general test score, along with recommendations from the faculty advisor and at least one other source, as well as transcripts and the statement of purpose. During their final senior undergraduate year they also will have to submit a formal application to the graduate school. A sample schedule of the two-year curriculum for Sloan can be viewed at www.human.cornell.edu/pam/sloan/current_students/Academics.cfm.

Double-Registration Program for Law

A small number of highly qualified applicants may be admitted to the Cornell Law School after only three years of undergraduate education. The requirements for admission under these circumstances are more stringent than for acceptance after four years of undergraduate study. Applicants must present outstanding qualifications and strong professional motivation. The junior year applicant follows the ordinary application procedures for Cornell Law School admission.

Interested students should contact the Law School director of admissions (Myron Taylor Hall, 255-5141) to discuss the admissions criteria. Because students accepted to this program will be spending their senior year away from Human Ecology, they need to plan ahead to ensure that distribution and major requirements for the B.S. degree will be met. Successful applicants need the approval of the college registrar in Human Ecology.

ACADEMIC ADVISING AND STUDENT SERVICES

Faculty Advisors

Students who choose to major in a particular department are assigned an advisor whose special interests match their own. Students may change advisors by working with the director of undergraduate studies (DUS).

Faculty advisors are available to discuss course requirements and sequences, useful electives inside or outside the college, as well as future goals and career opportunities. Although advisors must provide the advisor key number (PIN) during course enrollment each semester, it is the student's responsibility to make sure that his or her course selections meet graduation requirements for the major, the college, and the university. Directors of undergraduate studies in each department are available to answer questions about the advising system and the undergraduate major. Students who are exploring alternative majors should work closely with college counselors in the Office of Admission, Student, and Career Development.

Office of Admission, Student, and Career Development

The Office of Admission, Student, and Career Development (ASCD) (170–172 MVR) is a center for undergraduate freshman and transfer admission activities; student orientation activities; academic, personal, and career advising; study abroad; and multicultural student programs.

Personal counseling, including exploration of problems or concerns of a personal nature, is available to all students. These ASCD counselors, however, are not psychiatrists or therapists; they are available to help students understand and navigate the Cornell system, and to offer advice, support, assistance, and referral. Discussions are completely confidential. Appointments may be made through the receptionist in ASCD or by calling 255-2532.

In addition, ASCD provides advising support for several student organizations, including Human Ecology Ambassadors, the Mature Students Association, the Association for Students of Color, the Pre-professional Association toward Careers in Health, the Pre-law Undergraduate Society, the Orientation Committee, and Human Ecology Voices. Primary responsibilities of the office are listed below:

Academic advisement. This service is provided to all students as an adjunct to faculty advising. Counselors assist in course scheduling, academic planning, selection of a major, graduation requirements, and related issues.

Undeclared majors. Students who have not yet declared a major work closely with counselors in the Office of Student and Career Development, 172 MVR. We encourage

students to explore interests by taking courses in several Human Ecology departments

If you have general ideas about what you would like to study, or what you would like to do after college, then you have probably already narrowed your choice of majors. If you have, then choosing one of those majors as a tentative first home in the college makes a lot of sense.

- You will be assigned a faculty advisor by your department.
- You will receive departmental invitations and communications.
- You may change your major at any time.

Individual curriculum. A student who has educational objectives that cannot be met within the framework of any single major in the college may propose an Individual Curriculum. The proposed major must be focused within the college, combine course work from at least two departments to form a theme of study, and meet all Human Ecology curricular requirements. A student develops an individual curriculum in consultation with two faculty advisors from two departments in the college and the program coordinator, Patti Papapietro, Office of Student and Career Development, 172 MVR.

A student may propose such a curriculum following the freshman year and no later than the first semester of the junior year. If the plan seems workable and advisable, it will be approved by the coordinator as the student's curriculum and the proposed courses will become requirements. Potential changes must be approved by the program coordinator in order to ensure completion of degree requirements.

Career counseling. Career counseling is designed to help students clarify the relationship between personal skills, abilities, and career goals. Services are offered on an individual or group basis. Counselors assist in identifying career outcomes of the majors, developing networking skills, suggesting course work appropriate to various career goals, and assisting students in their general internship and job searches.

Post-graduate advisement. Material and advice pertaining to graduate and professional schools, graduate entrance examinations, courses of study, and career outcomes is readily available.

Students with disabilities. The College of Human Ecology is committed to assisting students with disabilities; accommodations are available to students who have registered with the Office of Student Disability Services (420 CCC). You are encouraged to contact SDS before your arrival on campus in order to arrange services in time for your first semester. Support within the college is available through the Office of Student and Career Development, 172 MVR.

Financial aid. Students who encounter financial difficulty or anticipate running short of funds may discuss their needs with a counselor. Complete information is available from the Office of Financial Aid, 203 Day Hall.

The Human Ecology Alumni Association Student Grants. Students in the college can apply for these competitive grants to further their academic interests through independent research, community outreach, conference travel, and limited summer study related to career preparation/professional development. Applications are available on the college web site.

Office of the Registrar

The Office of the University Registrar (B7 Day Hall) maintains the official academic records for the university and provides students with their official university transcripts. Additional information is available on the university registrar's web site: www.ss.cornell.edu/our. The college registrar (146 MVR) maintains students' official academic records, including the audit of progress toward the degree. The college registrar also provides services such as adding and dropping courses, correcting student records, and approving the transfer of credit from other institutions. Additional information is available on the HE registrar's web site: www.human.cornell.edu/registrar.

Multicultural Programs

The College of Human Ecology at Cornell University believes that a diverse community enriches the educational process for all members of the college community. Consequently, the college focuses particular efforts on a broad range of services for students of color. This includes not only recruitment but also services for students already on campus. Additionally, the college collaborates with university and New York State programs to assure that Human Ecology students have access to the vast array of services available here.

The professional staff of Human Ecology's Office of Admission, Student, and Career Development includes a director of multicultural programs who assists in the recruitment, admission, and enrollment of the most qualified and appropriate EOP (a program for New York State residents), African American, Native American, Hispanic American, and Asian American students to the college. All EOP students are invited to a special university-wide pre-freshman summer program that introduces accepted students to the Cornell campus and its classrooms. Services for current students include EOP/COSEP; academic, career, and personal counseling; recommendation letters for employment or graduate schools; and advising and support for student activities and programs.

Human Ecology Peer Partnership Program helps incoming students of color transition to the college and university. Small groups of freshmen, usually about six to eight students, are paired with faculty and upperclass students. They meet weekly for discussions, guidance, and explorations of the Cornell campus and the Ithaca community. For more information, contact Verdene Lee in the Office of Student and Career Development (172 MVR, 255-2532); or Gary Evans (E306 MVR, 255-4775); or Lorraine Maxwell (E310 MVR, 255-1958), both in the Department of Design and Environmental Analysis.

ASC (Association for Students of Color). With the motto "Yesterday's vision, today's reality, and tomorrow's hope," the ASC was created to bring together Human Ecology students to provide a supportive foundation for enrollment, retention, graduation, and career placement for students of color. The goals of the ASC are to increase communication between students of color, administration, and faculty; assist in increasing enrollment of students of color in Human Ecology; and assist in increasing the retention of students of color in Human Ecology and in their selected majors. ASC's two committees are recruitment/retention and career development. For more information, contact Verdene Lee (172 MVR, 255-2532).

CSTEP. The Collegiate Science and Technology Entry Program is the New York State program that provides enrichment activities for pre-med and pre-law New York State residents. Services are targeted at populations who are historically underrepresented in scientific, technical, health-related, or licensed professions and/or who are economically disadvantaged and who demonstrate interest in, and potential for, a CSTEP-targeted profession. For more information, contact Verdene Lee in the Office of Student and Career Development (172 MVR, 255-2532).

BBMTA (Black Biomedical and Technical Association). A university organization that provides enrichment activities for minority students interested in pursuing medical careers. For more information, contact Janice Turner (55 Goldwin Smith Hall, 255-9497).

Multicultural Education

Multicultural education broadens understanding of the world's many different societies as well as the various cultures of this country. Students take courses in the Cornell programs listed below that may be used to meet degree requirements. The college encourages students to incorporate courses from these cultural programs and from study abroad experiences in their degree programs. See information on study abroad opportunities.

Africana Studies and Research Center

American Indian Program

Asian American Studies Program

East Asia Program

Feminist, Gender, and Sexuality Studies Program

Gender and Global Change

Institute for European Studies

Languages and Linguistics

Latin American Studies Program

Latino Studies Program

Peace Studies Program

Program for Contemporary Near Eastern Studies

Program in Jewish Studies

Religious Studies

South Asia Program

Southeast Asia Program

International Students

The International Students and Scholars Office (ISSO, B50 Caldwell Hall, 255-5243) provides a broad range of services to international students. All international students should maintain contact with the ISSO. Counselors in ASCD are also available for assistance.

International students in the College of Human Ecology are encouraged to meet with the college registrar to discuss any questions

or concerns that they have about their academic record.

Career Planning, Graduate and Professional School, and Job Search Services

Counseling. The Office of Student and Career Development (172 MVR, 255-2532, -2988) provides career counseling and resources to help students explore career options through employment and internship opportunities and professional and graduate school advising. Individual assistance is available as well as group programming, workshops, and panels. Career development is strongly encouraged and supported, including skill development in résumé writing, networking, and interviewing. Students also are instructed in the use and protocol of online résumé submissions and on-campus recruiting. The office works in conjunction with Cornell Career Services (103 Barnes Hall, 255-5221) to facilitate access to university-wide programs.

The Career Development Center (CDC, 162 MVR) is a starting point for students looking for career information. Selected resources about career planning and job search techniques, general directories to begin job or graduate school searches, and information for alumni networking are housed there. Also available are Cornell Career Services handouts and registration forms, graduate and professional school testing booklets and registration packets, study abroad, as well as Urban and Capital Semester program materials. Computers provide access to web-based information regarding internship and employment opportunities, as well as graduate/professional schools.

The CDC is open weekdays during the academic semester. Student career assistants are available to provide résumé and cover letter critiques, conduct mock interviews on video, and help navigate the library resources. Final critiques can be provided by a career counselor once the student review has been completed.

To provide assistance to interested students, former Urban Semester Program participants comprise a portion of the CDC student staff and are available daily to answer questions about the program and its application process.

Selected services are listed below. Exploring such services will help students investigate their interests, skills, and values as they relate to career options, provide useful information and tips for a successful summer or full-time job search, and provide access to employment opportunities. In addition, please refer to the college's career services web site: www.human.cornell.edu/student.

Pre-law or Pre-med. Students who consider themselves pre-law or pre-med are encouraged to join a student group affiliated with ASCD. Those interested in pursuing a legal education can join PLUS (PreLaw Undergraduate Society), which provides information on applying to law school, preparing for the LSAT, and examining career opportunities in law. Students interested in pursuing a health-related career are welcome to join PATCH (Pre-professional Association Toward Careers in Health), which serves as a link to the university health careers network and provides guidance as students prepare for the MCAT, apply to medical school, and explore the various specialties of medicine. PATCH also offers a premed-mentor program for incoming students.

Extern Program. Students can spend one day to one week over winter break shadowing an alum in a career field of their choice. They observe day-to-day activities, discuss specific jobs and careers, and sometimes obtain limited hands-on experience. This service is available to sophomores, juniors, and seniors and is a valuable networking tool.

Fresh Program. This service is similar to the Extern Program but is available to freshmen only. Students can spend one day to one week over spring break shadowing an alum in a career field of their choice. In addition to career explorations, the Fresh Program provides excellent networking opportunities.

Internship and Employer Files. The CDC keeps files of more than 100 internships and hundreds of potential employers for student review.

Alumni Career Presentations. Alumni from the college come back to campus throughout the year to discuss their postgraduate or professional experiences. These meetings are ideal for exploring career outcomes of specific majors.

AlumNet. Students have access to Human Ecology alumni who can provide information on their careers and offer suggestions on a job search in their particular field or location. Students can query alumni on a host of variables and review selected alumni résumés to learn more about specific careers. AlumNet is also an excellent networking tool.

Job Search Workshops. The college hosts several workshops every semester. These workshops are designed to help students market themselves for either summer or full-time job opportunities. Students learn how to conduct effective job searches, write résumés and cover letters, and interview successfully.

CornellTRAK. Exclusively for Cornell students, CornellTRAK provides access to many important services offered by Cornell Career Services. These services include a listing of job opportunities, summer opportunities, alumni networking databases, access to on-campus recruiting, employer showcases, and more.

InterviewTRAK. This service provides access to on-campus interviews with employers interested specifically in Cornell students. Interviews occur primarily in banking and financial services, retail sales and management, facilities planning and management, and consulting. Please note that on-campus recruiting is only one component of a successful job search. Approximately 70 percent of Cornellians get their jobs through other resources.

New York Recruiting Consortium. Available exclusively to Human Ecology and Arts and Sciences students, the New York Recruiting Consortium is held in New York City over winter break. It offers interviews for full-time employment with employers involved in banking and financial services, retail sales/management, advertising, law, health care, and consulting.

NFP in New York City and NFP in Washington, D.C. Speak with representatives from dozens of New York City or Washington, D.C., not-for-profit/public service agencies about work or internship opportunities in health, education, advocacy, government, and more (held only during the spring semester).

Communications Consortium. Interview with organizations in advertising, public relations, film and radio, and print media. National organizations come to Syracuse, N.Y., to meet with students for individual appointments. During the spring semester, a job fair is held the evening before.

GRADUATION REQUIREMENTS AND POLICIES

It is important for students to track their graduation progress by comparing their current transcript with an appropriate curriculum sheet. Official transcripts may be obtained at the Office of the University Registrar (B07 Day Hall). Curriculum sheets are available in the Human Ecology registrar's office (146 MVR). Students are responsible for planning course selections to ensure that graduation requirements are fulfilled in eight semesters. Transfer students are allowed fewer semesters based on the number of transferable credits granted at admission. Students requiring additional semesters to fulfill their graduation requirements must meet with a Human Ecology counselor (172 MVR) and request to petition for an extension.

Grade Point Average (GPA) Requirement for Graduation

- Students must earn a minimum cumulative GPA of 2.0 (C) or better to graduate. Note: Students matriculating before spring 2004 may continue to follow the older cumulative GPA standard of a 1.7 (C-) or better.

Cornell Credit Requirements

- To graduate, a student must earn a minimum of 120 academic credits. Physical education credits and "00" courses do not count toward the 120 required credits. An unlimited number of credits may be taken in Cornell's statutory colleges.
- Of the 120 credits required to graduate, at least 60 credits must be earned at Cornell University (applicable to transfer students).
- As of fall 2003, students who matriculate as freshmen may apply a maximum of 15 non-Cornell credits earned before matriculation (including AP, IB, and college credits) toward the 120 credits required for graduation. For all students, an additional pre-approved 15 in absentia credits earned after matriculation may be applied. AP, IB, and transfer courses may be applied toward fulfillment of specific requirements regardless of whether the credit is transferred (i.e., required courses may be waived). Refer to "Advanced Placement Credit" for full details.
- No *college* credit earned before matriculation and used to meet Cornell's minimum admission requirements may be counted in the 120 credits required for graduation. This policy does not apply to transfer students.

- *Courses taught by a college in the high school setting or counted toward high school graduation are not allowed to count for either credits or fulfillment of requirements (i.e., Syracuse Project Advance).*
- Cornell extramural credit (defined below) is limited to 15 credits toward the 120 required.
- Strict limitations exist on the number of credits that can be applied toward the 120-credit minimum for special studies courses (400, 401, 402), for 403 courses, and for courses taken with an optional S-U grade. Details follow.

Human Ecology Credit Requirements

- The college divides the 120 minimum required academic credits into four general categories. (*Students should refer to curriculum sheets for their major for specific details on course selections. These sheets are available in the Office of the Registrar (146 MVR) and in the Office of Admission, Student, and Career Development (172 MVR) as well as on the college web site at www.human.cornell.edu.)*

  a. Category I—College distribution requirements

  Natural sciences

  Social sciences

  First-year writing seminars

  Humanities

  Quantitative and analytical courses (math and statistics)

  b. Category II—Requirements for a major

  c. Category III—Elective credits

  d. Category IV—Physical education

These categories are detailed below.

- **Students must complete 40 Human Ecology (HE) credits from Categories II and III.** (HE credits from Category I may not be applied toward this requirement.) A maximum of 3 credits from the 401–403 special studies series courses may be used toward this requirement. *Additional course-specific rules are listed below.*

  S-U grading rules for this requirement are as follows:

  1. If a course is a requirement in Category I or II, the course may *not* be taken for an S-U grade (unless it is the only grade option offered for the course).
  2. Courses used to count toward Category III (electives) that are taken for an S-U grade *may* also count toward the 40-credit requirement.
  3. Students should refer to the section on S-U grading rules for full S-U grading details.

- **Students must complete 9 Human Ecology (HE) credits from outside their major department from Categories I, II, or III.** Note: Biology and society majors are exempt from this requirement. A maximum of 3 credits from the 400–402 special studies series may be applied to this requirement. *Other course-specific rules for this requirement are listed below.*

  S-U grading rules for this requirement are as follows:

  1. If a course counting toward the 9-credit outside-the-major requirement is also a requirement in Category I or II, the course may *not* be taken for an S-U grade unless it is the only grade option offered for the course.
  2. Courses used to count toward Category III (electives) that are taken for an S-U grade may also count toward the 9-credit outside-the-major requirement.
  3. Students should refer to the section on S-U grading rules for full S-U grading details.

Course-specific rules that apply to *both* the 40 Human Ecology credit requirement and the 9 Human Ecology credit outside-the-major requirement:

1. Effective fall 2004, Human Ecology (prefix "HE") courses below the 300 level (e.g., HE 100, 101, 120, and 201) do not count toward either the 40-credit requirement or the 9-credit outside-the-major requirement. These HE-prefix courses that are below 300 level may be used as elective credit.
2. ECON 101 and 102 are considered Human Ecology credit courses and may be used to fulfill Human Ecology's 40- and 9-credit-outside-the-major requirements. If either or both courses are taken to fulfill a Category I or II requirement, they must be taken for a letter grade.
3. Experiential credit is applied to Human Ecology's 40- and 9-credit-outside-the-major requirements as follows:

   a. Urban Semester (HE 470, 480, 490/495). Effective fall 2004, students in all Human Ecology majors earn:

   - 15 Human Ecology credits and 6 credits toward the 9-credit outside-the-major requirement.

   b. Capital Semester (PAM 392). Effective fall 2004, PAM majors earn:

   - 15 Human Ecology credits and 7 credits as PAM credits.

   Non-PAM majors earn:

   - 15 Human Ecology credits and 7 credits toward the 9-credit outside-the-major requirement.

   c. Cornell in Washington (PAM 406). For this entire semester, PAM majors earn:

   - 8 credits toward the 40-credit requirement, which also count as 8 PAM credits.

   Non-PAM majors earn:

   - 8 credits toward the 40-credit requirement, **which also** count as 8 credits toward the 9-credit outside-the-major requirement. The remainder of the credits counts as elective credit.

Elective Credits

Students have individual objectives in choosing courses beyond the minimum requirements of the major. The university is diverse; the departments, centers, and special programs numerous; the fields of study almost unlimited. Counselors and faculty advisors are available to discuss which courses may interest students and best round out their education.

Students should consult the index in this catalog to learn where different subjects are taught in the university. Some subjects are taught in more than one division.

Elective credits can be earned in the endowed and statutory divisions of Cornell.

Endowed Colleges

Africana Studies and Research Center

College of Architecture, Art, and Planning

College of Arts and Sciences

College of Engineering

School of Hotel Administration

Johnson Graduate School of Management

Statutory Colleges

College of Agriculture and Life Sciences

College of Human Ecology

School of Industrial Relations

College of Veterinary Medicine

An unlimited number of credits may be taken in the statutory colleges of Cornell.

Physical Education Requirements for Graduation

1. Students must earn 2 credits of physical education within their first two semesters. These 2 credits do not count as part of the 60 Cornell credits, or as part of the 120 total credits required for a degree, or toward full-time status. Students who matriculate at Cornell with 12 or more credits must complete only 1 credit of physical education. Students who transfer more than 25 credits (excluding AP credits) are not required to take physical education at Cornell, regardless of whether they took physical education at their previous college.
2. Students must pass the university's swim test. Students who transfer more than 25 credits (excluding AP credits) are exempt. Refer to "University Requirements for Graduation—Physical Education—Swim Test" in this catalog for specifics.

Minimum Semester Requirements

1. Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester, and at least 5 credits of Human Ecology courses must be taken in the freshman and 7 credits in the sophomore years (ECON 101 and 102 may be used to fulfill this requirement).
2. Students must carry 12 credits each semester, excluding physical education, to be matriculated as full-time students. Mature students must carry a minimum of 6 credits each semester (see "Mature Student Guidelines" for details).
3. In special cases, a student may petition to carry between 8 and 12 credits. Forms for petitioning this exception and advice on how to proceed are available in the Office of Admission, Student, and Career Development (172 MVR).

Special Studies

- Students may use only 12 credits of 400, 401, 402, or 403 courses toward graduation.
- Additional credits of 400, 401, 402, or 403 courses can be taken but will not be applied toward graduation.

"00" Courses

- "00" courses do not count toward graduation requirements but do count toward full-time semester status.

Requirements for Majors

- Students must fulfill the requirements specified for a major that are in effect at the time of their matriculation or thereafter. The requirements are detailed in curriculum sheets that are maintained for each academic year.

S-U Grade Options

- The S-U grading option may *not* be used for courses in category I or required courses in category II unless it is the only grade option offered for those courses. S-U grades *may* be used for the 9 credits of Human Ecology course work outside of one's major and for electives in category III.
- Students may apply no more than 12 credits of S-U toward the 120 credits required for graduation. If a required course is offered only S-U, it will not count toward this limit. Also, Honors Research 499 taken S-U does not count against the 12 maximum limit. Students may take more S-Us if they choose, but the additional credit may not be applied toward graduation.

First-Year Writing Seminars

In each of their first two semesters of matriculation at the College of Human Ecology, students are required to take a Knight Program First-Year Writing Seminar. This policy also applies to transfer students. One or more of the seminars may be waived for transfer students if the college registrar grants credit for equivalent course work taken before matriculation at Cornell.

Those who do not fulfill this requirement on time will be referred to the Committee on Academic Status. Refer to "Criteria for Good Standing" for specifics on warning statuses that the committee applies to students who do not complete this requirement.

First-year writing seminars must be taken at Cornell and **may not be taken in absentia**. Students who receive a score of 5 on either the English Literature and Composition or English Language and Composition Advanced Placement (AP) exams can be exempt from *one semester* of their first-year writing seminar requirements. No other AP scores will allow a student this exemption (even if a lower score allows the student to use the course as elective credit toward graduation.) Students should be aware that the add/drop period for first-year writing seminars may be shorter in duration than the add/drop period for most Cornell classes.

Wells, Ithaca College, and Study Abroad Credits

Any credits earned with the Wells or Ithaca College exchange program are considered Cornell credits for the purpose of fulfilling the 60 Cornell credit graduation requirement. They may not be used for Human Ecology credit. Study abroad courses may also count as Cornell credit (but not for Human Ecology credit). Refer to "Cornell Credit Requirements" for details on how many advanced placement (AP) credits can be applied toward the 120 credits needed for graduation.

Advanced Placement Credit

Students can earn advanced placement credit from one of the following:

1. The requisite score on a departmental examination at Cornell (usually given during orientation week) or on a College Entrance Examination Board (CEEB) achievement test. The requisite scores for the CEEB exams are determined by the relevant department at Cornell, vary by subject, and are listed in the beginning of this catalog. College-specific rules apply toward many AP courses such as biology, English literature, English composition, and statistics.
2. A regular course taught at an accredited college to college students and approved by the relevant department at Cornell. Some departments have delegated the review of courses to college staff according to guidelines they have formulated. Some departments review each request individually. Some departments accept credit from virtually all accredited colleges; some do not.
3. Credit from the International Baccalaureates (IB) is evaluated individually.
4. Refer to "Cornell Credit Requirements" for details on how many Advanced Placement (AP) credits can be applied toward the 120 credits needed for graduation.

Note: Cornell does not accept credit for courses sponsored by colleges but taught in high schools to high school students, at colleges if enrollment is targeted at high school students, or if the course was used toward high school credit. This is true even if the college provides a transcript of such work. These courses also may not be used to fulfill college requirements. Students who have taken such courses may, however, take the appropriate CEEB test to qualify for credit as in paragraph 1 above. For further information and limitations on Advanced Placement credit, see the front pages of this catalog.

Foreign Language Study and Placement

Students who studied a foreign language before coming to Cornell and who want to continue must take either the CEEB test in that language or a Cornell departmental language placement test. The latter is given during orientation week in September and again in December, January, and May. Human Ecology students who plan to work with non-English–speaking people in this country or abroad often find it necessary to be proficient in another language. Many study abroad programs in non–English-speaking countries require the equivalent of two years of college-level language study.

Extramural Credit

Extramural credit is administered by the Office of Continuing Education and Summer Sessions (B20 Day Hall, 255-4987). Extramural credit is charged by the credit hour at the endowed tuition rate. Students may count only 15 credits of extramural credit toward their degree requirements. A student may enroll for extramural credit during the fall or spring semester only if he or she is not registered in the College of Human Ecology. For example, some students enroll for extramural credit before matriculating at Cornell.

An exception to this rule is credit earned in the Ithaca College or Wells College exchange programs. Students enrolled in these programs simultaneously maintain their status as students registered in the College of Human Ecology.

Humanities

Only certain classes will count for Category I, Humanities. To determine eligibility the college uses the following definition: "The humanities include the study of literature, history (including art and design history), philosophy, religion, and archaeology. Critical, historical, and theoretical studies of the arts and design are considered humanities. Languages and creative or performing arts such as the writing of fiction or poetry, painting, sculpting, designing, composing or performing music, acting, directing, and dance are not considered humanities." Additionally, social science courses such as sociology, government, anthropology, and psychology are not considered humanities.

Specifically, courses in the following list will count as humanities:

Africana Studies (literature and history)

Archaeology

Asian American Studies

Asian and Near Eastern Studies (literature and history)

Classics (literature and history)

Comparative Literature

Development Sociology 175, 318

English (literature only)

Fiber Science & Apparel Design 125

History

History of Art/History of Architecture

Landscape Architecture 282

Music and Theatre Arts (theory, literature, and history only)

Natural Resources 332

Philosophy

Policy Analysis and Management 631, 634, 652

Religious Studies

Science and Technology Studies 205, 206, 233, 250, 281, 282, 286, 292, 358, 360, 389, 433, 444, 447, 472, 481, 490

Math Requirement

1. Students must meet the minimum competency level of mathematics, equivalent to MATH 100 (calculus

preparation). This requirement can be met in any of the following ways:

- Advanced Placement credit (a score of 3 or better on either the AB or the BC Mathematics exam). Be sure that we get your score!
- Completion of MATH 100 or a higher-level mathematics course at Cornell.
- Completion of a course acceptable to the College of Human Ecology as equivalent to MATH 100 (or higher) at another institution. If you have already taken such a course, please submit the description to the Office of the Registrar in 146 MVR for evaluation.
- If you would like to take a course at another college or university at some point in the future, you must request permission and course approval by filing the Petition to Study In Absentia, available in the Office of the Registrar, 146 MVR.

2. Students must take 3 credits of statistics or advanced mathematics (calculus or above), or logic; departments may specify which courses they require to fulfill this requirement. Consult your director of undergraduate studies or printed curriculum materials for your department's requirements.

PROCEDURES

Registration and Course Enrollment

Registration Requirements

University registration is the official recognition of a student's relationship with the university and is the basic authorization for a student's access to services and education. Completion of registration is essential to enable the university to plan for and provide services and education, guided by the highest standards for efficiency and safety. Unauthorized, unregistered persons who use university services and attend classes have the potential to use university resources inappropriately and to displace properly registered students. In addition, the university assumes certain legal responsibilities for persons who participate as students in the university environment. For example, policy states that New York State health requirements must be satisfied. Because these requirements are intended to safeguard the public health of students, the university has a responsibility to enforce the state regulations through registration procedures.

The policy on university registration is intended to describe clearly the meaning of and the procedures for registration so that students can complete the process efficiently and be assured of official recognition as registered students. With the clear communication of the steps for registration, it is hoped that compliance will occur with a minimum of difficulty.

To become a registered student at Cornell University, a person must complete course enrollment according to individual college requirements; settle all financial accounts including current semester tuition; satisfy New York State health requirements; and have no holds from the college, the Office of the Judicial Administrator, Gannett Health Center, or the Bursar's office.

Individuals must become registered students by the end of the third week of the semester. Cornell University does not allow persons who are not registered with the university in a timely manner to attend classes. The university reserves the right to require unauthorized, unregistered persons who attend classes or in other ways seek to exercise student privileges to leave the university premises.

Verification of Registration

Many insurance companies or scholarship funds require verification of full-time registration at Cornell. Should students need such verification, they should use the official university verification service at http://certification.cornell.edu or request an official letter from the Office of the University Registrar (B-7 Day Hall). Students who need letters of good standing should contact the Human Ecology registrar's office (146 MVR).

Bursar Bill

A bursar bill is sent to each student over the summer and winter breaks; it summarizes what is owed to the university. The bursar bill can also be viewed through *Just the Facts*. Any questions regarding the bursar bill can be directed to the Bursar's office (260 Day Hall, 255-2336). Initial New York State residency eligibility is determined during the admissions process, but the Bursar's office will handle any request for a status change after matriculation.

Late University Registration

A student clearing his or her financial obligations after the deadline date on the bursar's bill is considered late. **Late registrants are assessed a finance charge on the bursar's bill starting from the date the bill is due**. According to university policy, all students must be registered before the end of the third week of classes. If for any reason a student registers after that time, the Bursar's office will charge a late fee. **Students who fail to register by the third week of the semester may be withdrawn from the university. Human Ecology students who do not arrange payment agreements satisfactory to the university bursar by the last day of classes for a semester will be withdrawn from the university. Furthermore, credit for any classes attended for the semester will not be awarded regardless of the letter grade received for a class. Should withdrawn students wish to return, they must reapply through the college admissions office.**

Proration of Tuition

Except for mature students, it is seldom possible to have tuition prorated if a student carries fewer than 12 credits during a semester. See the college registrar (146 MVR) or counselors (Office of Admission, Student, and Career Development, 172 MVR) for more information. Students of mature status may carry 6 to 11 credits without petitioning but must request that their tuition be prorated. Prorated tuition will be considered only for requests of between 3 and 10 credits. All requests should be made to the college registrar (146 MVR) by the end of the pre-enrollment period in the prior semester.

Course Enrollment

Initiating the Process

"CoursEnroll" selections are only "requests" for seats in classes. Between the end of the course enrollment period and the beginning of the next semester, course requests are evaluated by the offering college department. Students can determine if their requests have been successful when final schedules are published before the add/drop period. Students are expected to make course requests for the subsequent semester during a specified time in the current semester. Those dates are advertised publicly and are available on the University Registrar's web site (www.sas.cornell.edu/our). "CoursEnroll" takes place electronically, using software available through Just the Facts. During this time, each student must meet with his or her faculty advisor to discuss academic plans and to obtain the advising PIN code required for finalizing course requests. A student may enter and hold requests for courses before entering his or her PIN. Once the PIN number is entered, however, the schedule is locked and it is not possible to change until the add/drop period of the next semester. Important: students who fail to finalize the CoursEnroll process by not entering their PIN code by published deadlines **will lose all** course requests.

Information on courses is readily available in this catalog and in the *Course and Time Roster* for each semester. Both of these publications can be accessed on the web through CUInfo.

Incoming students will receive tentative schedules upon their arrival to campus, and will meet with faculty advisors during the orientation period.

Course Loads

Full-time matriculated students must carry at least 12 credits (exclusive of physical education courses) to maintain full-time status. Refer to the preceding section, "Minimum Semester Requirements," for details. The normal course load in the college ranges from 12 to 18 credits, although there is no limit to the number of statutory credits a student may take each semester. Nonetheless, students should avoid planning excessive workloads; the time required to keep abreast of courses tends to increase as the semester progresses. Students may not withdraw from courses after the seventh week of classes without petitioning and by substantiating extenuating circumstances. Students should avoid the need to drop courses by taking on a reasonable workload and using the drop period to make changes in their program.

Late Course Enrollment

Students who do not complete course enrollment during the CoursEnroll period usually must wait until the beginning of the next semester's add/drop period to enroll. Extensions are rarely granted and usually only for documented illness.

Students who do not meet the deadline for any reason should see the college registrar in 146 MVR as soon as possible. The college registrar can explain available options and course enrollment procedures under such circumstances.

Note: Students can review their course schedule via computer using *Just the Facts*. Students are responsible for checking their

course schedule for accuracy of course numbers, credit hours, grade options, and other data. Errors must be corrected immediately. Procedures for correcting enrollment errors as well as for making any other changes are described in the following section.

Course Enrollment Changes

It is to the student's advantage to make any necessary course enrollment changes as early in the semester as possible. Adding new courses early makes it easier for the student to keep up with course work. Dropping a course early makes room for other students who may need it for their academic programs.

Ideally, students evaluate their course load carefully at the beginning of the semester. If, in the first week or two, the instructors do not discuss the amount of material to be covered and the extent of student assignments, students need to ask about course requirements.

In addition to the procedures listed below for course enrollment changes, all add/drop forms for nutritional science majors must be signed by a faculty advisor.

Deadlines for Add/Drop and Grade Option Changes

Note: Brief add/drop periods exist for first-year writing seminars and half-semester courses.

1. During the first three weeks of the semester, courses may be added, dropped, or the grade option changed. Special status courses (400, 401, 402) may be added through the 11th week of classes. 403 Teaching Apprentice courses must be added during the first three weeks of the semester.
2. From the fourth through the seventh week of the semester, courses may be dropped. **Grade option changes may not be made at this point regardless of instructor's permission.**
3. After the seventh week of the semester, any requests for course changes must be made through the petition process. Students should request an appointment with an Admission, Career and Student Development counselor in 172 MVR to initiate the process.
4. After the seventh week of the semester, any student granted permission to drop a course after petitioning will automatically receive a grade of W (Withdrawn), and the course and grade will remain on the official transcript even if repeated in a later semester. The deadline to petition to drop a course with a "W" is the end of the 11th week.

Deadlines for Half-Semester Courses

Students may drop half-semester courses within the first three-and-one-half weeks of the course. Students may add a course after the first week of classes only with the permission of the instructor. After the first three-and-one-half weeks, students must petition to drop the course.

Time and Place for Add/Drop and Grade Option Changes

All students may adjust their schedules and grading options during the first three weeks of each semester. **To make course changes after the seventh week of the semester, a student must file a general petition form** (see "Petition Process.") Students are expected to attend classes and to do assigned work until the petition has been formally approved or denied.

Permission of Instructor

Certain courses may be taken only with the permission of the instructor as indicated in this catalog or on the official course description on the web. Undergraduates must obtain permission of the instructor to take any graduate course. Students must request the instructor's permission during the course enrollment period by placing their name on a list maintained by the departmental advising assistant.

Students interested in taking a course in the Department of Art in the College of Architecture, Art, and Planning are required to register with the departmental secretary (100 Olive Tjaden Hall) before enrolling in the course. Seniors who want to take an elective course in the Johnson Graduate School of Management are required to obtain permission of the instructor on a course authorization form that the student then files with that school's registrar in Sage Hall.

Course Enrollment while Studying Abroad

Students who plan to study abroad have several options available to enroll for their returning semester at Cornell. Students can consult with their faculty advisor before departure to consider the schedule of classes that they will take upon their return to campus. Once abroad, the student can use the web to access *Courses of Study* and the *Course and Time Roster* for the coming semester. The roster is available on the web in approximately the first week of October and the first week of March. Using these resources, the student can e-mail the course requests to the student's faculty advisor for approval; the faculty advisor can then e-mail them to the college registrar. A student who does not have access to the Internet while abroad can wait for the *Course and Time Roster* to arrive via airmail from the Cornell Abroad office. The student can then e-mail, fax, or mail the course requests to their faculty advisor and ask the faculty advisor to submit the course requests to the college registrar. The *Course and Time Roster* becomes available only the day that pre-enrollment begins; thus, students who depend on receiving the mailed copy will experience some delay in submitting their course requests. Requests must be submitted within the published deadlines. Because the faculty advisor submits requests for the students, the students do not have to finalize selections with a PIN number.

Oversubscribed Courses

Enrollment in many human ecology courses is limited. When a course is overenrolled, students are generally assigned on the basis of seniority or by criteria defined for each course as listed in this book. Students' professional goals may be considered. Those students not admitted to a course may be placed on a waiting list maintained by the professor or the department offering the course. Course instructors are responsible for determining the criteria to fill their classes from waiting lists. Waiting lists are maintained only for the first three weeks of each semester.

Limited-Enrollment Classes

Students who do not attend the first two class sessions of courses with limited enrollment may be dropped from the course list. Students can avoid being dropped from a class by notifying the instructor that unavoidable circumstances have prevented their attendance.

Cross-listed Courses

To apply a cross-listed course to graduation requirements, students must enroll in the department for which they need the credits. If changes in department designations need to be made, this must be done during the official course add period for the semester. To do so, students must complete a special form, which can be obtained in the registrar's office in 146 MVR.

Courses with Duplicate Content

Students should scrutinize course descriptions for details about other Cornell courses with duplicate content that would preclude a student from receiving full credit for duplicate courses. For example, students may not receive 6 credits toward graduation requirements if they take D SOC 101 and SOC 101. Because both are introduction to sociology courses, only 3 credits would be allowed. To aid students in this evaluation, the college maintains a partial list (those that are commonly required in Human Ecology curricula) of Cornell courses that have duplicate content.

Special Studies Courses

Each department in the College of Human Ecology (DEA, FSAD, HD, NS, and PAM) offers special studies courses that provide opportunities for students to do independent work not available in regular courses. One of those courses, designated 300 Special Studies for Undergraduates, is intended primarily for students who have transferred from another institution and need to make up certain course work.

The other special studies courses are 400 Directed Readings; 401 Empirical Research; and 402 Supervised Fieldwork. Juniors and seniors normally take those courses, and a faculty member in the department in which the course is offered supervises work on an individual basis. It is important for students to use the appropriate course number (300, 400, 401, or 402) for a special project.

To register for a special studies course, a student obtains a special studies form from the departmental office where he or she plans to take the course. The student discusses the proposed course with the faculty member under whose supervision the study would be done and then prepares a plan of work. If the faculty member agrees to supervise the study, the student completes a special studies form and obtains signatures from the instructor, faculty advisor, and department chair before submitting the form to the college registrar's office (146 MVR). Special studies forms are available in 146 MVR or in departmental offices.

Semester credits for special studies courses are determined by the number of contact hours the student has with the supervising faculty member (or a person designated by the faculty member). To earn 1 credit, a student must have the equivalent of three to four hours of contact time per week for 15 weeks

(a total of 45 contact hours). For additional credit, multiply the number of credits to be earned by 45 to determine the number of contact hours needed for the course. **Strict limitations exist on the number of special studies credits that can apply toward graduation and how these credits may be applied toward Category II requirements in the major. Refer to "Human Ecology Credit Requirements" for details**. To register in a special studies course taught in a department outside the college, follow the procedures established by that department.

Changes in Status

General Petition Process

The petition process permits students to request exceptions to existing regulations. Petitions are considered individually, weighing the unique situation of the petitioning student with the intent of college and university regulations. In most cases, extenuating circumstances are needed for a petition to be approved if it involves waiving a deadline. These are situations beyond a student's control, such as a documented medical emergency.

Students can avoid the necessity to petition by carefully observing the deadlines that affect their academic program. See "Course Enrollment Changes" above for some of the important deadlines. If unsure of a deadline, check with a counselor in the Office of Admission, Student, and Career Development (172 MVR) or with the staff in the college registrar's office (146 MVR).

A general petition may be needed to carry fewer than 12 credits, withdraw from a class after the seventh-week deadline, add a course after the third-week deadline, change a grade option after the third-week deadline, be exempt from one or more of the college's graduation requirements, substitute a required course in one's major with another course, or stay an additional semester to complete the graduation requirements.

Although many kinds of requests can be petitioned in the college, options other than petitioning may be preferable in some cases. To explore whether a petition is appropriate, the student may discuss the situation with a college counselor or the college registrar.

If a student decides to submit a general petition, the form is available in the registrar's office (146 MVR) and in the Office of Admission, Student, and Career Development (172 MVR) or on the web at www.human.cornell.edu/che/Academics/Undergraduate/Student_Services/Registrar/Forms-and-Petitions.cfm/. After completing the form and obtaining the required signatures, the student must turn the form in to the registrar. Once a decision is made, a letter is placed in the student's college mail folder indicating approval or denial of the petition.

Students may appeal the college registrar's decision to the Committee on Academic Status. Students who elect to appeal have the option of appearing in person before the committee to state their case. A member of the counseling staff can guide a student through this process.

In Absentia Study

Under certain conditions, credit toward a Cornell degree may be given for in absentia study, that is, study done at an accredited institution away from Cornell after the student matriculates in the College of Human Ecology. In absentia study can be done during any semester: fall, winter, spring, or summer. First-year writing seminars may not be taken in absentia.

To be eligible for in absentia study, a student must be in good academic standing and must receive permission in advance from the college registrar. A student not in good standing may study in absentia but will not receive transcript credit until the Committee on Academic Status has returned the student to good standing. Students not in good academic standing who wish to finish their degree in absentia must seek pre-approval from the college's Committee on Academic Status via the general petition process. In some cases, students may petition for in absentia credit after the work has been completed, but there is no guarantee that such credit will be awarded without advance approval.

In absentia petition forms are available in the Human Ecology registrar's office (146 MVR) or on the web at www.human.cornell.edu/student/forms/. The student submits the form to the Human Ecology registrar's office (146 MVR). In absentia study during the fall or spring semester carries a nominal administrative fee. (Contact the Bursar's office, 260 Day Hall, for the current amount.) Students will receive a letter in their college mail folder from the college registrar notifying them of the petition decision.

Note: Students seeking pre-approval for in absentia course work should do so well in advance as turnaround time for the approval process can be variable.

A student may take up to 15 credits in absentia as long as the courses do not duplicate courses already taken and the in absentia courses are applicable to the requirements of the college. Students who study abroad during the summer or winter term are limited to a maximum of 9 in absentia credits. Study abroad during the fall or spring semester must be done through the Study Abroad office and is not considered in absentia study. **Students studying while on a leave of absence during the spring or fall semesters may not receive credit for nondomestic campus programs.**

On the following rare occasions a student's petition for more than 15 credits in absentia may be allowed: (1) the work taken represents a special educational opportunity not available at Cornell, (2) it relates to the student's particular professional goals, and (3) those goals are consistent with the focus of the college. The in absentia petition form is used to request more than 15 credits in absentia. Wells and Ithaca College credit are not considered in absentia credit and are not included in the 15-credit limit.

The college registrar requests approval from the appropriate department if a student wants to apply in absentia credit to requirements in his or her major. Students seeking in absentia credit for a modern foreign language in which they have done work must obtain the approval of the appropriate language department (College of Arts and Sciences). The department will recommend the number of credits the student should receive and may require the student to take a placement test after returning to Cornell.

The student is responsible for having the registrar of the institution where in absentia study is done send transcripts of grades directly to the Human Ecology registrar's office (146 MVR). Only then will credit be officially assessed and applied to the Cornell degree. Credit for in absentia study will be granted *only* for those courses with grades of C- or better. Courses may not be taken for S-U grades unless it is the only grade option offered. In absentia courses appear on the Cornell University transcript, but the grades are not calculated in the student's GPA.

A student who holds a Regents' or Children of Deceased or Disabled Veterans Scholarship may claim that scholarship for study in absentia if the study is done in a college in New York State and if it is for a maximum of 15 credits acceptable to the College of Human Ecology.

The rules regarding study in absentia apply to transfer students with the additional stipulation that at least 60 credits must be taken at Cornell. At least 40 of the 60 credits must be in the College of Human Ecology at Cornell unless the student has transferred equivalent human ecology credit. (No more than 20 credits of equivalent credit may be applied to the 40 credits required in human ecology course work.)

Leaves of Absence

A student may request a leave of absence before the beginning of the semester or during the first seven weeks of the semester for which a leave is sought. A leave may be extended for a second semester by making a written request to the Office of Admission, Student, and Career Development (172 MVR). Note: In absentia study status and leave of absence status are not the same; however, students may petition to earn credits with either status. Students on leave must notify the college registrar (146 MVR), in writing, of their intention to return to campus at least one month before the beginning of the semester. **Those whose leave period has expired will be withdrawn from the college after the seventh week of the semester they were due back.**

Students considering a leave of absence should discuss their plans with a counselor in the Office of Admission, Student, and Career Development. The counselor can supply the necessary forms for the student to complete and file with the Human Ecology registrar's office (146 MVR). Leaves initiated after instruction begins will be charged a percentage of the semester tuition. (Refer to "Bursar Information" in this catalog for a billing schedule.)

Requests for a leave of absence received after the first seven weeks of the semester, or requests for a leave of absence from students who have already had two semesters' leave of absence, will be referred for action to the Committee on Academic Status. The committee may grant or deny such requests, attaching conditions to the leave as it deems necessary. Leaves of absence after the first seven weeks are generally granted only when there are compelling reasons why a student is unable to complete the semester, such as extended illness.

A student who requests a leave of absence after the first seven weeks is advised to attend

classes until action is taken on the petition. A student whose petition for a leave of absence is denied may choose to withdraw or to complete the semester. If the petition for leave is approved the student's courses will remain on the transcript with W grades.

The academic records of all students who are granted a leave of absence are subject to review, and the Committee on Academic Status may request grades and other information from faculty members to determine whether the student should return under warning or severe warning or in good academic standing.

Under certain documented medical circumstances a student may be granted a **medical leave of absence**. Medical leaves are initiated by the student with Gannett Health Center. If Gannett Health Center recommends a medical leave for the student, the college registrar may grant the leave. A medical leave is for an indeterminate period of time not to exceed five years. Students who are granted a medical leave of absence should maintain contact with a counselor in the Office of Admission, Student, and Career Development (172 MVR, 255-2532) to arrange their return to campus. The counselor will advise the student on procedures to obtain a recommendation from Gannett Health Center to the college registrar for the student's return. Students should plan sufficiently in advance to assure time for Gannett Health Center and the college registrar to consider their request.

Withdrawal

A withdrawal is a termination of student status at the university. Students may withdraw voluntarily at any time by notifying a counselor in the Office of Admission, Student, and Career Development and filing a written notice of withdrawal in the Human Ecology registrar's office. A student considering such an action is urged to first discuss plans with a counselor in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

In some instances a student may be given a withdrawal by the college registrar. Students who leave the college without an approved leave of absence, or do not return after the leave has expired, will be given a withdrawal after the seventh week of the semester in which they fail to register.

A student who has withdrawn from the college or who has been given a withdrawal by the college registrar and who wishes to return at a later date must reapply through the Office of Admission for consideration along with all other applicants for admission. If the student was in academic difficulty at the time of the withdrawal, the request for readmission will be referred to the Committee on Academic Status (CAS) for consideration, and that committee may stipulate criteria under which the student may be readmitted to the college.

GRADES AND EXAMINATIONS

Grade Definitions and Equivalents

The official university grading system uses a system of letter grades ranging from A+ to D-, with F denoting failure. An INC grade is given for incomplete work and R is given at the end of the first semester of a two-semester course. If a student is given permission to withdraw from a course after the seventh week of the semester a "W" is automatically assigned. Students can view their grades on Just the Facts after the semester has ended. See "Grading Guidelines" for more information on the official university grading policies.

To compute a semester grade point average (GPA), first add up the products (credit hours X grade quality points) and divide by the total credit hours taken. Grades of INC, R, S, SX, U, UX, and W should not be included in any GPA calculations. A grade of F has no quality points, but the credits are counted, thereby lowering the average. A cumulative GPA is simply the sum of all semester products divided by all credits taken. Refer to "Repeating Courses" for details on how GPA is affected if a student repeats a course. For further help on calculating a GPA ask at the college registrar's office (146 MVR).

These are the quality point equivalents:

A+ = 4.3	C+ = 2.3
A = 4.0	C = 2.0
A- = 3.7	C- = 1.7
B+ = 3.3	D+ = 1.3
B = 3.0	D = 1.0
B- = 2.7	D- = 0.7
	F = 0.0

Repeating Courses

Students are allowed to register a second time for a course they have already passed or in which they received an F. If a student has previously passed a course he or she is taking a second time, the second registration will not count toward the degree requirements, and the grade received will not be included in the cumulative GPA.

If a student enrolls in a course in which he or she previously received an F, the credits from the second registration will count toward the graduation requirements and the grade will be included in the cumulative GPA. The F will also remain on the record and will be included in the GPA.

S-U Grades

Some courses in the college and in other academic units at Cornell are offered on an S-U basis (see course descriptions in this book and on the Cornell web site). Courses listed as SX-UX are available only on an S-U basis and may not be taken for a letter grade. University regulations concerning the S-U system require that a grade of S be given for work equivalent to a C- or better; for work below that level, a U must be given. **No grade point assignment is given to a grade of S, and S or U grades are not included in the computation of semester or cumulative averages**. A course in which a student receives a grade of S is, however, counted for credit. No credit is received for a U. Both the S and U grades appear on a student's record. A student who is attempting to qualify for the semester's Dean's List must take at least 12 credits of course work graded non–S-U. See "Awards and Honors" for more details about the Dean's List.

No more than 12 S-U credits will count toward a student's 120-credit graduation requirement. However, a student may take more than one S-U course in any one semester. **S-U courses may be taken only as electives or in the 9 credits required in the college outside the major** unless the requirements for a specific major indicate otherwise. Freshmen enrolled in ENGL 137 and 138 (offered for S-U grades only) are permitted to apply those courses to the first-year writing seminar requirement. If a **required** course is offered only S-U, it will not count toward the 12-credit limit.

To take a course for an S-U grade, a student must check the course description to make sure that the course is offered on the S-U basis; then either sign up for S-U credit during course enrollment, or obtain and file an add/drop form in the Human Ecology registrar's office before the end of the third week of the semester. After the third week of the semester, students cannot change grade options.

Grades of Incomplete

A grade of incomplete is given when a student does not complete the work for a course on time but when, in the instructor's judgment, there was a valid reason. A student with such a reason should discuss the matter with the instructor and request a grade of incomplete. Students are at risk of going under the minimum semester requirement if an INC grade in a course puts the total number of credit hours under 12 for the semester. For more information, refer to "Minimum Semester Requirements."

A grade of incomplete may remain on a student's official transcript for a maximum of two semesters and one summer after the grade is given, or until the awarding of a degree, whichever is the shorter period of time. The instructor has the option of setting a shorter time limit for completing the course work.

If the work is completed within the designated time period, the grade of incomplete will be changed to a regular grade on the student's official transcript. **If the work is not completed within the designated time period, the grade of incomplete automatically will be converted to an F**.

When a student wants to receive a grade of incomplete, the student should arrange a conference with the instructor (preferably before classes end and the study period begins) to work out the agreement. A form, called Explanation for Reporting a Final Grade of F or Incomplete, which must be signed by both the instructor and the student, needs to be submitted by the instructor to the Human Ecology registrar's office. This form is submitted with the final grade sheets whenever a grade of incomplete is given. This form is for the student's protection, particularly in the event that a faculty member with whom a course is being completed leaves campus without leaving a record of the work completed in the course. If circumstances prevent a student from being present to consult the instructor, the instructor may, if requested by the student, initiate the process by filling out and signing the form without the student's signature and turning the form in to the Human Ecology registrar's office with the grade sheet. Before a student will be allowed to register for succeeding semesters, he or she must go to the Human Ecology registrar's office to fill out and sign the remainder of the form.

If the work is completed satisfactorily within the required time, the course appears on the student's official transcript with an asterisk adjacent to the final grade received for the semester in which the student was registered for the course. A student who completes the work in the required time and expects to receive a grade must take the responsibility for checking with the Human Ecology registrar's office (about two weeks after the work has been handed in) to make sure that the grade has been received. Any questions should be discussed with the course instructor.

Grade Disputes

Students who find themselves in disagreement with an instructor over grades have several options:

1. Meet with the instructor and try to resolve the dispute.
2. Meet with the chair of the department in which the instructor has his or her appointment.
3. Meet with the associate dean for undergraduate studies of the college in which the course was taught.
4. Meet with the university ombudsman (118 Stimson Hall, 255-4321).

A student may also seek advice from his or her faculty advisor or with a counselor in the Office of Admission, Student, and Career Development (172 MVR).

Examinations

Both the preliminary and final examination schedules are printed every semester in the *Course and Time Roster*. The current exam information is also available on the university registrar's web page at www.sws.cornell.edu/our.

Final Examinations

The following is quoted from the *Cornell University Faculty Handbook*, 1990, pages 66–67:

"The University Faculty long ago established, and has never reversed, the policy that each course should require a final examination or some equivalent exercise (e.g., a term paper, project report, final critique, oral presentation, or conference) to be conducted or due during the period set aside for final examinations.

"Although not specifically prohibited, it is University policy to discourage more than two examinations for a student in one 24-hour time period and especially on any one day. It is urged that members of the faculty consider student requests for a make-up examination, particularly if their course is the largest of the three involved and thus has the strongest likelihood of offering a makeup for other valid reasons, e.g., illness, death in the family, etc.

Legislation of the University Faculty governing study period and examinations is as follows:

1. No final examinations can be given at a time other than the time appearing on the official examination schedule promulgated by the Registrar's Office without prior written permission of the Dean of the Faculty.
2. No permission will be given, for any reason, to schedule final examinations during the last week of classes or the designated study period preceding final examinations.
3. Permission will be given by the Dean of the Faculty to reschedule examinations during the examination period itself if requested in writing by the faculty member, but only on condition that a comparable examination also be given for those students who wish to take it at the time that the examination was originally scheduled. The faculty member requesting such a change will be responsible for making appropriate arrangements for rooms or other facilities in which to give the examination. This should be done through the Registrar's Office.
4. No tests are allowed during the last week of scheduled classes unless such tests are part of the regular week-by-week course program and are followed by an examination (or the equivalent) in the final examination period.
5. Papers may be required of students during the study period if announced sufficiently far in advance that the student did not have to spend a significant segment of the study period completing them.
6. Faculty can require students to submit papers during the week preceding the study period.
7. Take-home examinations should be given to classes well before the end of the regular semester and should not be required to be submitted during study period but rather well into the examination period.

Students have a right to examine their corrected exams, papers, and the like, in order to be able to question their grading. They do not, however, have an absolute right to the return thereof. Exams, papers, etc., as well as grading records, should be retained for a reasonable time after the end of the semester preferably until the end of the following semester, to afford students such right of review."

Preliminary Examinations

The following is quoted from the *Cornell University Faculty Handbook* (1990), pages 65–66:

"Preliminary examinations are those given at intermediate times during a course. It is common to have three of these in a semester to encourage review and integration of major segments of the course, to provide students with feedback on how well or poorly they are progressing, and to contribute to the overall basis for a subsequent final grade.

The most convenient times and places for "prelims" are the normal class times and classrooms. But many courses, particularly large ones with multiple sections, choose to examine all the sections together at one time and to design an examination that takes more than one class period to complete. In such cases the only alternative is to hold the prelim in the evening. This practice creates conflicts with other student activities, with evening classes and laboratories, and among the various courses that might choose the same nights.

To eliminate direct conflicts, departments offering large multisection courses with evening prelims send representatives annually to meet with the dean of the University Faculty to lay out the evening prelim schedule a year in advance. Instructors of smaller courses work out their own evening prelim schedules, consulting their students to find a time when all can attend. Room assignments are obtained by the faculty member through the contact person in his or her college or the Central Reservations Coordinator.

The policy governing evening examinations is as follows:

1. Evening examinations may be scheduled only on Tuesday and Thursday evenings and only after 7:30 P.M. without prior permission from the Office of the University Faculty.
   a. Such prior permission is not, however, required for examinations or makeup examinations involving small numbers of students (generally 30 or fewer) provided that the scheduled time is acceptable to the students involved and that an alternate examination time is provided for those students who have academic, athletic, or employment conflicts at the time scheduled.
2. Permission from the Office of the University Faculty to schedule on evenings other than Tuesdays and Thursdays or at a time before 7:30 P.M. will be granted only on the following conditions:
   a. Conditions such as the nature of the examination, room availability, large number of conflicts, etc., justify such scheduling.
   b. An alternate time to take the exam must be provided for those students who have academic, athletic, or employment conflicts at the time scheduled.
3. If there is a conflict between an examination listed on the schedule developed at the annual evening prelim scheduling meeting and an examination not on the schedule, the examination on the schedule shall have a priority, and the course not on the schedule must provide an alternate time to take the examination for those students fated with the conflict.
4. If there is a conflict between examinations, both of which are on the schedule developed at the annual evening prelim scheduling meeting or both of which are not on the schedule, the instructors of the courses involved must consult and agree on how to resolve the conflict. Both instructors must approach this resolution process with a willingness to provide an alternative or earlier examination.
5. Courses using evening examinations are strongly urged to indicate this in the course description listed in *Courses* and must notify students of the dates of such examinations as early as possible in the semester, preferably when the course outline is distributed."

ACADEMIC STANDING

Criteria for Good Standing

The College of Human Ecology has established a set of **minimum academic standards** that all students must meet or exceed each semester. These standards are as follows:

1. A student must maintain a semester and cumulative grade point average of 2.0 or higher.
2. A student must successfully complete at least 12 credits per semester, excluding physical education courses. Mature students must carry at least 6 credits each semester, also excluding physical education.
3. Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester such that at least 5 credits must be taken by the end of the second semester (ECON 101 and 102 may be used to fulfill this requirement).
4. A student must be making "satisfactory progress" toward a Human Ecology bachelor's degree.
5. All students must complete their requirements for first-year writing seminars (FWS) during their first two semesters at Cornell. Students who do not take a required first-year writing seminar in the first semester that they matriculate at the College of Human Ecology will be placed on a warning status.

Students who have completed the second or subsequent semesters of matriculation at the college who have not taken both of the required writing seminars will be placed on a severe warning with danger of being withdrawn status. In these cases, if the student has not pre-enrolled for an FWS for the upcoming semester, a hold will be placed on the student's semester registration status until he or she is actually enrolled in an FWS. **If this requirement is not completed by the end of that semester, the student will be withdrawn from the college.**

At the end of each semester, the Committee on Academic Status (CAS) reviews each student's academic record to ensure that the **minimum academic standards** listed above are met. The committee then takes appropriate action for students whose academic achievement is considered unsatisfactory as defined by these criteria. CAS considers each case individually before deciding on a course of action. In an effort to support every student's success, the committee may take any of the following actions:

1. Place a hold on a student's university registration status for the current or upcoming semester.
2. Withdraw the student permanently from the college and Cornell University.
3. Require the student to take a leave of absence for one or more semesters.
4. Issue a warning to the student at one of the following levels:
   a. Severe warning with danger of being withdrawn
   b. Severe warning
   c. Warning

   These imply that if the student does not show considerable improvement during the semester, the committee may withdraw the student.
5. Add the student's name to a review list; students with this status are monitored by the committee throughout the semester.
6. Return the student to good standing.

Students placed on a required leave must appeal to CAS to return. This appeal occurs at the end of the required leave period. Students who have been withdrawn may appeal the decision before the committee during the pre-semester appeals meeting. Students who have been placed on a warning status owing to incomplete or missing grades may request that their status be reviewed for possible updating to good standing once the grade records reflect the updates or corrections. These requests should be made using the general petition process and submitted to the college registrar.

All students with an academic warning status automatically will be reviewed for specific criteria at the end of the subsequent semester. In most cases, students put on warning, severe warning, or severe warning with danger of being withdrawn status will be informed of conditions that they are expected to fulfill to return to good standing. In general, these conditions are that a student must earn a minimum semester GPA of 2.0, complete 12 credits (exclusive of physical education), and not have any incomplete, missing, F, or U grades on his or her most recent semester record.

If a student who has been previously placed on a required leave wishes to return to the college, he or she must submit a plan of study to the committee before being rejoined.

Students who have been withdrawn from the college by CAS may request that they be readmitted. Such students have three years from the date they were withdrawn to make this appeal with assistance from a counselor in the Office of Admission, Student and Career Development (172 MVR). After three years, a former student must apply for readmission through the college's Office of Admission. A student applying for readmission should discuss his or her situation with a counselor in the Office of Admission, Student and Career Development. The student also should also talk with others who may be able to help—faculty advisors, instructors, or a member of the university medical staff. Any information given to the committee is held in the strictest confidence.

Academic Integrity

Academic integrity is a critical issue for all students and professors in the academic community. The University Code of Academic Integrity states that (1) a student assumes responsibility for the content and integrity of the academic work he or she submits, such as papers, examinations, or reports and (2) a student shall be guilty of violating the code and subject to proceedings under it if he or she:

a. Knowingly represents the work of others as his or her own.
b. Uses or obtains unauthorized assistance in any academic work.
c. Gives fraudulent assistance to another student.
d. Fabricates data in support of laboratory or field work.
e. Forges a signature to certify completion or approval of a course assignment.
f. Uses an assignment for more than one course without the permission of the instructor involved.
g. Uses computer hardware and/or software to abuse privacy, ownership, or user rights of others.
h. In any manner violates the principle of absolute integrity.

The college's Academic Integrity Hearing Board, which consists of a chairperson, three faculty members, and three students, hears appeals from students who have breached the code. It also deals with cases brought directly to it by members of the faculty.

Academic Records

Students may obtain their Cornell academic record in several ways. The **Cornell transcript**, which is the official record of the courses, credits, and grades that a student has earned can be ordered with no charge at the Office of the University Registrar (B7 Day Hall) or online at http://transcript.cornell.edu. For more information, call 255-4232. Students may also access their grades and course schedules electronically using **Just the Facts**. **Students should be in the habit of checking Just the Facts by the second week of every semester to confirm that their schedule and grade options are correct**. Adjustments must be made before published enrollment deadlines.

The college also maintains a **graduation progress worksheet** for each student showing progress toward the degree. At the beginning of fall semester continuing students should check their updated worksheet at www.registrar.human.cornell.edu. It is important to check this document and bring any errors to the attention of the staff in the college registrar's office (146 MVR). Disclaimer: These worksheets are unofficial tally tools used by the college registrar and in no way substitute for a student's responsibility for tracking the progress toward completing degree requirements as outlined in the curriculum sheet for each major.

Access to Records

The Family Educational Rights and Privacy Act of 1974 assures students of privacy of their records. The law also assures students' access to their records. Information concerning a student's relationship with the university is considered restricted and may be released only at the student's specific written request. Restricted information includes the courses elected; grades earned; class rank; academic and disciplinary actions by appropriate faculty, student, or administrative committees; and financial arrangements between the student and the university. Letters of recommendation are restricted information unless the student has specifically waived right of access.

Students who want additional information on access to their records may contact the Office of the College Registrar (146 MVR) or the Office of the University Registrar (B7 Day Hall). An inventory of those student records maintained by Cornell University offices in

Ithaca, their location, and cognizant officer are available in the Office of the Dean of Students (401 Willard Straight Hall).

For specific information, refer to the university's policy "Access to Student Information" at www.univco.cornell.edu/policy/ASI.html, or talk with the college registrar.

ACADEMIC HONORS AND AWARDS

The college encourages high academic achievement and recognizes outstanding students in several ways.

Honors

Dean's List. Excellence in academic achievement is recognized each semester by placing on the Dean's List the names of students who have completed satisfactorily at least 12 credits of letter grades and who have a semester GPA of 3.7 or above. No student who has received an F or U in an academic course will be eligible.

Kappa Omicron Nu seeks to promote graduate study and research and to stimulate scholarship and leadership toward the well-being of individuals and families. As a chapter of a national honor society in the New York State College of Human Ecology, it stimulates and encourages scholarly inquiry and action on significant problems of living—at home, in the community, and throughout the world.

Students are eligible for membership if they have attained junior status and have a cumulative average of B or higher. Transfer students are eligible after completing one year in this institution with a B average.

Current members of Kappa Omicron Nu elect new members. No more than 10 percent of the junior class may be elected to membership and no more than 20 percent of the senior class may be elected. Graduate students nominated by faculty members may be elected. The president of Kappa Omicron Nu has the honor of serving as First Degree Marshall for the college during May commencement.

Bachelor of science with honors recognizes outstanding scholastic achievement in an academic field. Programs leading to a degree with honors are offered to selected students. Information about admission to the programs and their requirements may be obtained from the appropriate department or division. Students in other departments who wish to qualify for honors should contact the Office of Admission, Student, and Career Development (172 MVR) during their sophomore year or the first semester of their junior year. Honors candidates must have a minimum GPA of 3.3 and have demonstrated potential for honors-level research. To graduate with honors a student must take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and successfully defend it in front of a committee.

Bachelor of science with distinction recognizes outstanding scholastic achievement. Distinction is awarded to students in the top 10 percent of the graduating class based on the last 60 credits earned at Cornell. The graduating class includes students who will complete requirements for bachelor of science degrees in January or May of the same academic year or the prior August. Names of seniors who meet these requirements are presented to the faculty of the college for approval.

The primary objectives of the honor society, **Phi Kappa Phi**, are to promote the pursuit of excellence in higher education and to recognize outstanding achievement by students, faculty, and others through election to membership. Phi Kappa Phi is unique in that it recognizes scholarship in all academic disciplines. To be eligible for membership students must rank in the top 10 percent of the senior class, or in the top 5 percent of the junior class. Provisions also exist for the election of faculty members and graduate students whose work merits recognition.

Awards

The Elsie Van Buren Rice Award in Oral Communication is awarded for original oral communication projects related to the college's mission by undergraduate students in the College of Human Ecology. The contest is held each year in February and awards prizes totaling $1,500.

The Flora Rose Prize is given biennially to a Cornell junior or senior whom, in the words of the donor, "shall demonstrate the greatest promise for contributing to the growth and self-fulfillment of future generations." The recipient receives a cash prize of $500.

The Florence Halpern Award is named for the noted psychologist, Dr. Florence Halpern, in recognition of her lifelong interest in "innovative human service, which betters the quality of life." In that spirit the award is presented to an undergraduate in the College of Human Ecology who has demonstrated, through supervised fieldwork or community service, creativity in the search for solutions to human problems. The award carries a $500 cash prize.

COLLEGE COMMITTEES AND ORGANIZATIONS

Student Groups and Organizations

Following are brief descriptions of some of the organizations that offer valuable experiences to human ecology students. Information about many other student activities on campus may be obtained from the Office of the Dean of Students (401 Willard Straight Hall).

The **Cornell Design League** was formed to give students interested in apparel a chance to express their creativity outside of the classroom by producing a fashion show every spring. It has become concerned with all aspects of a professional presentation. Consequently, it also provides a creative outlet for those interested in graphics, photography, illustration, or theater production. Although many of its designers are part of the Department of Fiber Science & Apparel Design, the Design League welcomes people of all majors and schools.

Students have opportunities to work throughout the community in a variety of service capacities. They volunteer in day care centers, youth programs, health-related agencies, services for elderly people and people with disabilities, as well as nutrition programs, arts organizations, and Ithaca schools. For further information, contact the **Public Service Center** (200 Barnes Hall). Call 255-1148 for information about volunteer work or 255-1107 for information about work-study arrangements.

The **Human Ecology Ambassadors** is a group of Human Ecology undergraduates who assist the Office of Admission in the area of new student recruitment and yield. Ambassadors participate in group conferences with prospective students to provide information from a student's perspective, conduct high school visits, assist with on-campus programs for high school students and potential transfer students, and help with prospective students, phonathons, and letter writing. In addition, ambassadors attend regular meetings and serve as coordinators for activities in the Office of Admission.

For information, contact the Office of Admission, Student, and Career Development (172 MVR, 255-5471).

The mission of the **Human Ecology Voices** is to build unity among students, faculty, and staff in the College of Human Ecology. Membership consists of all representatives of all other Human Ecology student organizations and other interested students. Patti Papapietro in the Office of Admission, Student, and Career Development (172 MVR, 255-2532), serves as Voices advisor.

The **Human Ecology Mature Students Association** is an organization of students who are 24 years of age or older at the time of matriculation. Many mature students need to balance family, work, and other concerns with their academic efforts. The Mature Students Association strives to help by providing a forum for resource exchange and referral, support, socializing, and special projects depending upon expressed interest. These goals are pursued through seminars and informational meetings, the mature students listserv, supplementary orientation activities, liaison with other university offices, and the encouragement of informal networking. For more information, contact Patti Papapietro in the Office of Admission, Student, and Career Development (172 MVR).

Students interested in the relationship between the physical environment and human behavior may join the **Human-Environment Relations Students Association (HERSA)**. For more information, contact the Department of Design and Environmental Analysis.

The **International Facility Managers Association (IFMA)** also has a student chapter. Membership information is available from the Department of Design and Environmental Analysis.

The **Association for Students of Color (ASC)** unites Human Ecology students of color to provide a supportive foundation for their enrollment, retention, graduation, and career placement. ASC members work toward these goals by

1. participating in admissions hosting programs and conducting high school visitations.
2. sponsoring presentations on career and graduate school outcomes of a Human Ecology education.

3. providing volunteer services to the Cornell and Ithaca communities.
4. attending regular meetings and hosting annual fall and spring forums.

For more information, contact Verdene Lee in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **PreLaw Undergraduate Society (PLUS)** is sponsored by Human Ecology and welcomes members from the Cornell community. Meetings provide information and support for students considering careers in law. Programs include information on the law school admission process, law school applications, and LSAT preparations. Additionally, PLUS offers tours of the Cornell Law School and information panels with current law students. Guest speakers include practicing attorneys, law faculty, and current law school students. For more information, contact Kelly Deasy in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **Preprofessional Association Toward Careers in Health (PATCH)** provides support, advising, and up-to-date information to students pursuing careers in health care. Programs include academic advising, guest speakers from allopathic and alternative medicine, information on medical school admissions, exposure to complementary health care career options, MCAT preparation tips, information on research and internship opportunities, and a visit to a local medical school. This student-run organization is sponsored by Human Ecology and is open to the Cornell community. For more information, contact Paula Jacobs in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

The **Orientation Committee** consists of students and advisors interested in planning and implementing programs to acquaint new students with the College of Human Ecology. The committee is particularly active at the beginning of each semester and is always eager for new members. For more information, contact Patti Papapietro in the Office of Admission, Student, and Career Development (172 MVR, 255-2532).

Membership in the **Sloan Student Association** is open to students interested in health care and related fields. For more information, contact the president of the association (122 MVR, 255-7772).

The **Students for Gerontology (SFG)** is composed of students from a wide variety of majors who are interested in career and internship opportunities that contribute to the well-being of our aging population. Programs sponsored by this organization focus on developing linkages with community organizations and other student gerontology groups. SFG meets monthly. For more information, contact Nancy Wells, faculty advisor, Bronfenbrenner Life Course Center (E220 MVR, 254-6330).

The **Health and Nutritional Undergraduate Society (Health NUTS)** promotes nutritional well-being through education, communication, and research. Members of the student chapter organize programs such as Food and Nutrition Day in March, and host on-campus speakers in nutrition and health-related fields. The student chapter is open to all students interested in nutrition education. For more information, contact Gail Canterbury (335 MVR, 255-2628).

Committees and Councils

Several official organizations exist within the college to deal with matters of policy and to provide leadership in college planning. Most include elected student and faculty representatives; the actions of these various groups affect all students directly or indirectly.

The Educational Policies Committee (EPC) has two student members, one graduate and one undergraduate, who vote along with the faculty members on all matters relating to college academic policy. Recommendations are submitted to this committee regarding revisions in degree requirements, new curriculum changes, and new course approval.

Students also have the opportunity to serve on the **Admissions Policy Subcommittee**, and the **Academic Integrity Hearing Board**.

The Selection Committee for the Chancellor's Award for Excellence in Teaching or Professional Service handles the nomination and selection process for this prestigious yearly award. The committee consists of three teaching faculty members, one professional staff member, and three undergraduate members.

The **Human Ecology Alumni Association Board of Directors** includes two student board members—one junior and one senior. One student is selected each spring to begin a two-year term as student representative. The two students co-chair the board's Student Activities Committee, which works to increase the visibility of the Alumni Association among the student body by funding a variety of activities. The student members also bring an important perspective to board deliberations about programming and annual goals.

The Committee on Academic Status does not include student representatives but does have a faculty representative from each department. This committee is responsible for upholding the academic standards of the college and takes action when appropriate. The committee also hears appeals regarding student petitions and requests to be readmitted to the college.

INTERDEPARTMENTAL COURSES

HE 100(1000) Critical Reading and Thinking
Fall, spring, or summer. 2 credits (credit toward graduation depends on individual college). Limited enrollment. Prerequisite: freshman or sophomore standing; juniors and seniors by permission of instructor. Letter or S-U grades. Staff.
Enables students to increase critical reading and thinking abilities. Examines theory and research associated with a wide range of reading, thinking, and learning skills. Emphasis is placed on developing and applying analytical and evaluative skills. Laboratory instruction is individualized and provides the opportunity to focus intensively on increasing comprehension, reading rate, and vocabulary.

HE 101(1010) College Achievement Seminar
Summer, six-week session. 2 credits (credit toward graduation depends on individual college). Prerequisite: Pre-freshman Summer Program students. Letter or S-U grades. Staff.
Improves the study and learning skills of incoming freshmen. Emphasis is placed on acquisition of skills necessary to achieve academic success. Topics include time management, note-taking, mapping, textbook comprehension, exam preparation, and exam strategies. The application of theory to the demands of Cornell course work is stressed. In addition, students are introduced to library and computing resources through hands-on projects.

HE 301(3010) Collaborative Leadership
Fall. 4 credits. Includes required retreat beginning Fri. afternoon, Aug. 24, and ending when bus returns to campus about 4 p.m. Sun., Aug. 26. Priority given to sophomores and juniors. Letter grades only. Lec and sec. B. Bricker.
Introduces the principles of leadership theory and practice of leadership. Serves as the introduction to leadership for a leadership honors certificate but is also appropriate for students who simply want to understand leadership better. Assignments are diverse, including individual and group projects, journaling, the creation of case studies, an in-depth team project, several presentations, and a variety of other activities. More information on this course is available at the Courses of Study web site: http://cuinfo.cornell.edu/Academic/Courses/. Complete syllabus available on request.

HE 405(4050) Mentoring for Advanced Leadership
Spring and fall. 2 credits. Capstone course for Leadership Certificate Program. Prerequisite: permission of instructor. Letter grades only. B. Bricker.
Supports advanced leadership students through critical months of their junior-senior project development. Taught in a small seminar format. Emphasizes reflection on the leadership experience and planning for individual projects. Reviews leadership themes and principles. With carefully selected readings and assignments, students learn to write effective grant proposals, to design evaluation programs appropriate for their leadership programs, write press releases, and think about what makes for successful lobbying for policy change. Students work together to provide critical feedback and support for one another through important challenges in their own leadership development.

HE 407(4070) Leadership in the Nonprofit Environment
Spring. 3 credits. Limited to 30 students. Letter grades only. Planned MWF 11:15–12:05. Staff.
The nonprofit sector contributes nearly 10 percent of U.S. GNP and employs 11 to 12 percent of citizens. This economic sector touches all our lives—as volunteers, donors, receivers of service, employees, or board members. This course provides an opportunity to explore the challenges and opportunities of the nonprofit sector. After becoming familiar with the issues and complications of strategic charitable giving, students will consider actual grant applications from community organizations and make decisions to award $10,000 in grant aid. HE 407 is made possible by a generous gift of $10,000 from the Sunshine Lady Foundation. Students learn to

read, evaluate, and write effective grant proposals. They create a Request for Proposal (RFP) to invite community nonprofits to apply for funding. They study organizational missions, the strengths and challenges of private, not for profit organizations, the motivation for giving time and money, and many related themes.

THE URBAN SEMESTER PROGRAM IN MULTICULTURAL DYNAMICS IN URBAN AFFAIRS

Cornell in New York City provides students with many study options that focus on multicultural dynamics in urban affairs. The options available include internships, individual and group community service projects, research, independent study, collaborative learning, and mentorships. Students must enroll concurrently in the three courses HE 470, 480, and 490 or 495. Students learn through reflection and action. Program options are possible throughout the academic year, during winter break, and in the summer.

Courses of study enable students to seek out the relationship between theory and practice, apply theory to practice, identify and acquire professional practice skills, and learn about the impact of diversity on New York City. By applying ethnographic research techniques and methods, students learn to think conceptually, reflect on their actions, and be agents of change.

HE 406(4060) Fieldwork in Diversity and Professional Practice
Summer, eight-week session. Variable credit. Staff.
Students participate in a community-based medical center hospital or clinic member of New York Presbyterian Hospital and Weill Medical College of Cornell University. This is a four-day internship and one day of seminars per week.

HE 470(4700) Multicultural Issues in Urban Affairs
Fall and spring. 3 credits. Students must take course during semester they participate in Urban Semester Program. Staff.
Uses New York City as a classroom. The landscapes, built environments, and people in them are the texts. In the beginning, students study the formation of this multicultural city by traversing lower Manhattan and imagining New Amsterdam as it became New York City. Then they investigate a number of neighborhoods and speak with local leaders about diversity issues in context, in practice, and in use, to learn how multicultural issues are experienced by people and how they make sense of them.

HE 480(4800) Communities in Multicultural Practice
Fall and spring. 6 credits. Students must take course during semester they participate in Urban Semester Program. Staff.
Concerns urban children and youth in communities of color. Each week of the semester, students participate one day in the school lives of children pre-K through eighth grade in selected neighborhoods in New York City. Students keep journals of their reflections on their experiences and observations.

HE 490(4900) Multicultural Practice
Fall and spring. 6 credits. Students must take *either* HE 490 *or* 495 during semester they participate in Urban Semester Program; which is appropriate depends on student's placement and is determined by Urban Semester director. Staff,
Students explore the intersection of organizational culture with issues of diversity. They investigate the nature of organizational culture and how it engages and includes or does not include diversity. Students report back in seminars their understanding and analysis of their internship organizations and their industry's role in creating conditions and environments of inclusion or exclusion. The course explores the conditions and processes that have brought about inclusion or exclusion.

HE 495(4950) Culture, Medicine, and Professional Practice in a Diverse World
Fall and spring. 6 credits. Students must take *either* HE 490 *or* 495 during semester they participate in Urban Semester; which is appropriate depends on student's placement and is determined by Urban Semester director. Staff.
Students participate in several experiential learning environments related to medicine over the course of the semester. Students rotate in a four-week unit, supported by Pastoral Care and ER, as well as several other choices through the semester. Medical and health-related practitioners make presentations throughout the semester.

HE 499(4991/4992) Biology & Society Honors Project I and II
Fall and spring (yearlong). Credit TBA. Students who are admitted to the honors program are required to complete two semesters of honors project research and to write an honors thesis. The project must include substantial research, and the completed work should be of wider scope and greater originality than is normal for an upper-level course. The student must find a project supervisor and a second faculty member willing to serve as faculty reader; at least one of these must be a member of the Biology and Society faculty. Students must register for the total credits desired for the whole project each semester (e.g., 8 credits for fall and 8 credits for spring). After the fall semester, students receive a letter grade of "R" a letter grade for both semesters is submitted at the end of the second semester whether or not the student completes a thesis or is recommended for honors. Minimally, an honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements.

DESIGN AND ENVIRONMENTAL ANALYSIS

F. Becker, chair (E-106 MVR, 255-1950);
K. Gibson, director of undergraduate studies;
J. Elliott, director of graduate studies;
A. Basinger, S. Danko, J. Elliott, P. Eshelman, G. Evans, K. Gibson, R. Gilmore, A. Hedge, J. Jennings, J. Laquatra, W. Sims, N. Wells

Note: A minimal charge for photocopied course handouts may be required.

DEA 4+1 Master's Degree Program

Outstanding students who complete their four-year undergraduate degree in DEA may apply for a master of arts/M.A. (interior design) or a master of science/M.S. (human environment relations) degree that typically requires one additional year of graduate study.

Through careful planning by the beginning of their junior year, many of the courses required in the M.A. or M.S. programs can be taken during the undergraduate years, creating an opportunity to focus the fifth year of study on completing graduate courses and thesis requirements. Typically, students will take four to five courses in their fall semester as a graduate student, and two to three courses plus their thesis research in the spring semester. Students should expect to complete their thesis by the end of the summer term of their fifth year.

Admission to the 4+1 Master's program is not automatic. Students must meet with their advisors early in their undergraduate programs to plan carefully for this possibility. In the fall of the senior year, interested students must submit an online application to the Graduate School. The GRE exam and a portfolio are not required for 4+1 applicants. In addition to the online application, 4+1 applicants must submit a 4+1 study proposal to the department. Students who have compiled a strong undergraduate record in the department are usually good candidates for admission into the graduate program in Design and Environmental Analysis.

DEA 101(1010) Design Studio I
Fall. 3 credits. Limited to 20 students per sec. Prerequisite: DEA majors; permission of instructor for nonmajors; priority given to interior design majors. Option I majors must take DEA 101 in fall of first year. B- or higher in DEA 101 required to take DEA 102 and 115. Must complete incomplete grade in DEA 101 before taking 102 and 115. Cost of materials: approx. $200. J. Elliott.
Introduces the fundamental vocabulary and principles of two- and three-dimensional design. Students experiment with the development of image and form through problem-solving activities. Visit http://instruct1.cit.cornell.edu/courses/dea101/

DEA 102(1020) Design Studio II
Spring. 3 credits. Prerequisite: Option I DEA majors only. Option I majors must take DEA 102 and 115 concurrently. B- or higher in DEA 101 required to take DEA 201. Must complete incomplete grade in this course before taking DEA 201. Cost of materials: approx. $300; shop fee: $10. P. Eshelman.
Studio course in three-dimensional design with an interior design emphasis. Explores problems in spatial organization through drawings and models.

[DEA 111(1110) Making a Difference: By Design
Fall. 3 credits. Limited to 130 students. Lab fee: $25. S. Next offered 2008–2009. Danko.

This course focuses on issues of leadership, creative problem-solving, and risk-taking through case study examination of leaders in business, education, medicine, human development, science, and other areas who have made a difference using design as a tool for positive social change. Using a micro to macro framework, students examine how design affects their daily lives and future professions from the person to the planet. Additional topics include nurturing creativity, visual communications, socially responsible design and business, culture, and ecological issues.]

DEA 115(1150) Design Graphics and Visualization

Spring. 3 credits. Limited to 18 students. Prerequisite: Option I DEA majors only; DEA 101 with grade of B- or higher. Corequisite: DEA 102. B- or higher in DEA 115 required to take DEA 201. Must complete incomplete grade in this course before taking DEA 201. Minimum cost of materials: $200; technology fee: $10. K. Gibson.

Introductory studio course for interior designers. Emphasizes orthographic and perspective drawing and formal and conceptual presentation methods. Reinforces graphic and design concepts through projects, readings, and field trips. Visit http://instruct1.cit.cornell.edu/courses/dea115.

DEA 150(1500) Introduction to Human-Environment Relations

Spring. 3 credits. Lec, disc. G. Evans.

Human-Environment Relations is an interdisciplinary field concerned with how the physical environment and human behavior interrelate. Most of our attention will be focused on what role the physical environment plays in human health and well-being. Our focus will be on residential environments and on urban and natural settings. We will also take a look at how human attitudes and behaviors affect environmental quality. Hands-on projects plus exams. Lecture and discussion sections Writing in Major option also available. Visit http://instruct1.cit.cornell.edu/courses/dea150.

DEA 201(2010) Design Studio III

Fall. 4 credits. Limited to 18 students. Prerequisites: Option I DEA students; DEA 101, 102, 111, 115, and 150 (minimum grades of B-); must complete incomplete in 201 before taking 202. Corequisites: DEA 251, DEA 215, DEA 460. Minimum cost of materials: $150; lab fee: $40; required field trip: approx. $130. J. Jennings.

Third semester in the studio sequence of eight semesters. The theme and objectives focus on design as critical thinking, introducing means by which students can think, draw, write, and build their way critically through design. Taken concurrently with DEA 251, the course applies historical theory to contemporary design projects. Also includes a collaborative project with a professor and students from another design discipline. Visit http://instruct1.cit.cornell.edu/courses/dea201.

DEA 202(2020) Design Studio IV

Spring. 4 credits. Prerequisites: Option I DEA students; DEA 201 and 203. Pre- or corequisite: DEA 204. Must complete incomplete grade in this course before registering for DEA 301. Minimum cost of materials: $120; field trip fee. R. Gilmore.

Based on programmatic criteria from real clients, students learn how to design several types of interior environments, from health care facilities to local nonprofit agencies. Emphasis is on space planning, lighting design, construction of custom light fixtures, and service learning, where students use design to transform the facilities of social service agencies in the community.

DEA 203(2030) Digital Communications

Spring. 2 credits. Limited to 27 students. Priority given to DEA majors. Lab fee: $10. J. Elliott.

Digital information technologies for designers of the built environment. Students explore issues in relation to text and image through analysis and composition of form and content. Through a series of weekly projects the students work toward the development of a professional web-based portfolio of self-promotional materials. The primary objective is to reinforce principles of visual communications while learning the rudiments of vector, raster, and html graphic software. Visit http://instruct1.cit.cornell.edu/courses/dea203/.

DEA 204(2040) Introduction to Building Technology

Spring. 2 credits. W. Sims.

Introduction to building technology for interior designers and facility managers. Develops basic understanding of buildings and building systems and their implications for interior design and facility management. Covers basic building types; structural systems; construction materials and methods; HVAC systems; plumbing, electrical, lighting, fire, and security systems; and telephone, computer, and other communication systems. Visit http://courseinfo.cit.cornell.edu/courses/dea204.

DEA 215(2150) Digital Graphics

Fall, first seven weeks of semester. 1 credit. Prerequisites: none. Letter grades only. S. Curtis.

This course will be an investigation into use of computer graphic software programs for the purpose of design, visualization, and presentation. The course will investigate the inherent differences between raster and vector graphics and how to use a variety of computer graphics programs such as Adobe Photoshop, Illustrator, InDesign, and Acrobat to achieve a desired end result. Lab-based course providing technical illustration in Adobe Illustrator and Photoshop.

DEA 241(2410) Introduction to Computer-Aided Design (CAD)

Spring, first seven weeks of semester. 1 credit. Prerequisites: DEA majors, DEA 101, or permission of instructor. Letter grades only. Minimum cost of materials: $50. S. Curtis.

This course provides an understanding of, and experience with, electronic drafting on the microcomputer. It includes a basic understanding of the features, limitations, and considerations associated with the operation of the latest release of AutoCAD. By the end of the course, the student will be proficient enough with the AutoCAD software to draw and plot most projects required by their course of study as they relate to architecture and interior design.

DEA 242(2420) Advanced Computer-Aided Design (CAD)

Spring, second seven weeks of semester. 1 credit. Prerequisites: DEA majors, DEA 101 or 241, or permission of instructor. Letter grades only. Minimum cost of materials $50. S. Curtis.

This course provides a thorough understanding of the 2-D features, limitations, and considerations associated with the operation of the latest release of AutoCAD. This course builds on knowledge gained in DEA 241 and requires DEA 241 as a prerequisite. Commands and concepts such as multi-sheet plotting, xreference drawings, blocks and attributes, OLE, raster images, user coordinate systems, and customization of AutoCAD are covered. This course will give the student a high level of proficiency with the AutoCAD software as they relate to architecture and interior design.

DEA 250(2500) The Environment and Social Behavior

Fall. 3 credits. Limited to 16 students. Priority order: DEA seniors, juniors, sophomores, freshmen. Prerequisite: DEA 150 and written permission of instructor. Field trip fee: $65. G. Evans.

This course is about architecture and human behavior. It is centered on two key principles: 1. the complex interplay of social and personal factors with the physical environment largely determines how the built environment influences human well-being; 2. aesthetics is not sufficient in judging design—we must also consider how the built environment affects health, interpersonal relationships, and performance along with preference. Two major projects, one in collaboration with a design studio and a real community client.

DEA 251(2510) History and Theory of the Interior

Fall. 3 credits. Limited to 35 students. Priority given to DEA majors. J. Jennings.

A historic study of interior architecture and design with an emphasis on the concepts of design theory. Overarching themes encompass several time periods from the classical to the 20th century and isolate cultural patterns, spatial ideas, dialectics, design elements, and theorists. Reading, discussion, analytical exercises, essays, and a field trip are included. Visit http://instruct1.cit.cornell.edu/courses/dea251/.

DEA 300(3000) Special Studies for Undergraduates

Fall or spring. Credit TBA. Department faculty.

Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the college registrar's office. The form, signed by both the instructor directing the study and the head of the department, is filed at course registration or during the change-of-registration period.

DEA 301(3010) Design Studio V

Fall. 5 credits. Prerequisites: DEA 111, 150, 201, 202, 203, and 204. Corequisites: DEA 303 and 459. Must complete incomplete grade in this course before registering for DEA 302. Minimum cost of materials: $150; shop fee: $10; optional field trip: approx. $10. P. Eshelman.

This intermediate-level interior design studio focuses on design for a special population inclusive of young children, older adults, and people of any age living with a congenital or hereditary condition, injury, or disease. The

course is organized around a semester-long project broken into four phases: pre-design, design, full-scale model construction, and design documentation and presentation. Collaboration with students in DEA 250/660 provides experience in the application of evidence-based information in the design process.

DEA 302(3020) Design Studio VI
Spring. 5 credits. Limited to 18 students. Prerequisites: DEA 301 and 303 or permission of instructor. Corequisite: DEA 305. Must complete incomplete grade in this course before registering for DEA 407. Minimum cost of materials: $200; shop fee: $10; field trip fee: $20. K. Gibson.
Sixth semester in the studio sequence of eight semesters. Emphasizes use of the microcomputer as a creative tool in the design process. Explores social, cultural, and physical factors related to the interior environment through assignments, readings, and a field trip. Design and problem-solving skills are reinforced according to project type. Visit http://instruct1.cit.cornell.edu/courses/dea302.

DEA 303(3030) Interior Materials and Sustainable Elements
Fall. 3 credits. Approx. cost of materials: $10. R. Gilmore.
A sustainable approach to the evaluation and selection of materials, finishes, and furnishings for the built environment has the potential to protect our planet. This course provides an introduction to sustainable sources and asks students to manipulate materials, understand performance testing, use building codes, create a life-cycle cost analysis, and complete interior specifications. Field trips provide an overview of the manufacturing process, and group projects culminate in the presentation of research on current "green" products and resources.

DEA 304(3040) Introduction to Professional Practice of Interior Design
Spring. 1 credit. Limited to 18 students. Prerequisite: Option I DEA students. A. Basinger.
Introduction to organizational and management principles for delivery of interior design and facility management services. Covers basic organizational structures and basic management functions within interior design and facility management organizations, work flow and scheduling, business practices, legal and ethical responsibilities and concerns, contracts, basic contract documents such as working drawings and specifications, supervision of construction and installation, and cost estimation.

DEA 305(3050) Construction Documents and Detailing
Spring. 2 credits. Prerequisites: DEA 301 and 303. Corequisite: DEA 302. Minimum cost of materials: $50; required field trips: $10. R. Gilmore.
A continuous dialogue between the idea for an interior space and the reality of its final built form is contained within construction documents, also known as working drawings and specifications. Students study the history of architectural documentation, the organization of construction drawings, schedules, and specifications, and the detailing of interior elements and construction methods by touring a local millwork shop. Each student completes a comprehensive set of construction documents for the renovation of an existing conference facility located on the Cornell campus.

DEA 325(3250) Human Factors: Ergonomics–Anthropometrics
Fall. 3 credits. Recommended: DEA 150. Undergraduate sec of DEA 651; shares lec but meets for an additional hour. DEA 651 has additional readings and projects. A. Hedge.
Implications of human physical and physiological characteristics and limitations on the design of settings, products, and tasks. An introduction to engineering anthropometry, biomechanics, control/display design, work physiology, and motor performance. Includes practical exercises and field project work. Visit http://ergo.human.cornell.edu.

DEA 350(3500) Human Factors: The Ambient Environment
Spring. 3 credits. Recommended: DEA 150. Undergraduate sec of DEA 652; shares lec but meets for an additional hour. DEA 652 has additional readings and projects. A. Hedge.
Introduces human-factor considerations in lighting, acoustics, noise control, indoor air quality and ventilation, and the thermal environment. Views the ambient environment as a support system that should promote human efficiency, productivity, health, and safety. Emphasizes the implications for planning, design, and management of settings and facilities. Visit http://ergo.human.cornell.edu.

DEA 354(3540) Facility Planning and Management Studio
Spring. 4 credits. Prerequisite: DEA 459 or permission of instructor. Letter grades only. Minimum cost of materials: $200. W. Sims.
For advanced undergraduates interested in facility planning and management. Purpose is to provide basic tools, techniques, and concepts useful in planning, designing, and managing facilities for large, complex organizations. Covers strategic and tactical planning for facilities, organizing to deliver facility management services, project management, space forecasting, space allocation policies, programming, relocation analysis, site selection, building assessment, space planning and design, furniture specifications, and moves. Considers sociopsychological, organizational, financial, architectural, and legal factors. Visit http://courseinfo.cit.cornell.edu/courses/dea354_654.

DEA 400–401–402–403(4000–4010–4020–4030) Special Studies for Undergraduates
Fall or spring. Credit TBA. S-U or letter grades. DEA faculty.
For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of DEA not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department office. This form must be signed by the instructor directing the study and the department head and filed at course registration or within the change-of-registration period in the college registrar's office, 146 MVR, along with an add/drop slip. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department head is necessary. Students, in consultation with their advisors and the instructor should register for one of the following subdivisions of independent study.

DEA 400(4000) Directed Readings
For study that predominantly involves library research and independent reading.

DEA 401(4010) Empirical Research
For study that predominantly involves data collection and analysis or laboratory or studio projects.

DEA 402(4020) Supervised Fieldwork
For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

DEA 403(4030) Teaching Apprenticeship
For study that includes teaching methods in the field and assisting faculty with instruction. Students must have demonstrated a high level of performance in the subject to be taught and in the overall academic program.

DEA 407(4070) Design Studio VII
Fall. 5 credits. Prerequisites: DEA 302, 303, 304, and 305. Must complete incomplete grade in this course before registering for DEA 408. Minimum cost of materials: $150; field trip: $50. R. Gilmore.
Comprehensive historic preservation design studio in which students complete each phase of the adaptive reuse of a historic structure. Working with real buildings and real clients, students conduct market research, complete a building assessment, and then design new uses for viable, yet older structures. Lecture topics range from professional practice strategies, to the history of preservation, to the secretary of the interior's Standards for Rehabilitation. Components of the work include program document, code compliance, concept development, schematic and design development presentations, and construction documents.

DEA 408(4080) Design Studio VIII
Spring. 5 credits. Prerequisites: DEA 301, 302, 303, and 304. Minimum cost of materials: $150. S. Danko.
Design problem-solving experiences involving completion of advanced interior design problems. Problems are broken into five phases: programming; schematic design and evaluation; design development, including material and finish selection; design detailing; and in-process documentation and the preparation of a professional-quality design presentation.

DEA 410(4100) Facility Planning and Design in a Diverse Society
Spring. 3 credits. Prerequisites: DEA 150, 111, 250, 653, or permission of instructor. Letter grades only. L. Maxwell.
This is an upper-level undergraduate course appropriate for undergraduate and graduate students in facility planning and management, human environment relations and interior design students in DEA as well as students outside of DEA who are interested in how the built environment should respond to a diverse society. The course will examine facility planning and design issues in a diverse society. Specifically, the role of culture, gender, stage in the life cycle, and disability in planning facilities of various types will be studied. This course will examine the issues of

diversity from two perspectives. One, how are the implicit and explicit assumptions about the user expressed in various aspects of the built environment in our society; and two, how do we purposely plan facilities in a diverse society.

DEA 415(4150) Strategic Planning for Healthcare and Educational Facilities

Spring. 3 credits. Prerequisites: DEA 150, 250, 459, or permission of instructor. Letter grades only. Staff.

This is an upper-level undergraduate course appropriate for undergraduate and graduate students in facility planning and management, the Sloan program, urban planning, and design/architecture students interested in facility planning and design issues for healthcare or educational institutions. The course will examine the facility planning and management issues that affect the education or healthcare industries. The course will specifically look at how these facilities respond to changes in (1) the needs of their target population, (2) technology and communications, (3) sustainability, (4) pedagogy and healthcare delivery practices, (5) regulatory and policy issues related to the healthcare or educational industry, and (6) daily operational and maintenance issues.

DEA 422(4220) Ecological Literacy and Design (also ARCH 461[4601])

Spring. 3 credits. Prerequisite: junior or senior standing. Letter grades only. Cost of field trips: approx. $25. J. Elliott.

Lecture/seminar course for advanced undergraduates interested in learning about the effects of designing the built environment of the biophysical world. Course objectives are to develop sensitivities to environmental issues, construct conceptual frameworks for analysis, and demonstrate how ecological knowledge can be applied to the practice of design through participatory approaches to learning. Visit http://instruct1.cit.cornell.edu/courses/dea422/.

[DEA 423(4230) Restaurant Design Charrette

Spring. 1 credit. Limited to 18 students. Prerequisite: permission of instructor. Letter grades only. Minimum cost of materials: $50. Next offered 2008–2009. R. Gilmore and S. Robson.

This intensive weekend-long course pushes the boundaries of current restaurant design by developing a concept plan for an innovative restaurant in a nontraditional setting. Students work in teams to develop design solutions and prepare design presentations for review by course instructors and visiting design professionals.]

DEA 430(4300) Furniture as a Social Art

Spring. 3 credits. Limited to 15 students. Prerequisite: permission of instructor. Cost of building materials: $150. (Additional shop hours are made available.) P. Eshelman.

The focus is on how innovation in furniture design is inspired. Three sources of inspiration explored are: aesthetic interpretation; material and manufacturing technologies; and users' needs. The interplay among these three sources of inspiration will be examined with emphasis on the last, users' needs. Assignments involve both analyzing furniture products currently on the market and designing and constructing a furniture piece for a special population inclusive of young children, older adults, and people of any age living with a congenital or hereditary condition, injury, or disease.

DEA 451(4510) Introduction to Facility Planning and Management

Fall. 1 credit. Letter grades only. F. Becker.

Introduction to the field of facility planning and management. Focuses on how the planning, design, and management of an organization's physical facilities can help it meet its business objectives. Topics include the history of the field, strategic planning, space planning and design, project management, building operations, workplace change management, real estate, and computer-aided facility management systems.

DEA 453(4530) Planning and Managing the Workplace

Fall. 3 credits. Prerequisite: junior or senior standing. F. Becker.

Through lectures, readings, and a field studies project, this course explores how the planning, design, and management of health care facilities affects the experience of patients and care-giving staff; and the relationship of these outcomes to quality of health measures. Invited lecturers from around the country and world (via videoconferencing) provide a broad-based perspective into different approaches to hospital planning and design, and how the form of hospitals is changing in response to new information and medical technologies, changing work patterns, and shifting demographic patterns. Students' field projects involve analysis of an actual health care setting, and the development of innovative solutions to improve the quality of health care provided in it.

DEA 454(4540) Computer-Aided Facilities Management.

Fall, second seven weeks of semester. 1 credit. Prerequisites: none. Letter grades only. S. Curtis.

This course will be an investigation into the use of computer-aided facilities management software in facilities management. Emphasis will be placed initially on understanding how FM CAD systems work. Topics such as Building a Space Inventory Database, Adding Occupancy Data, AutoCAD commands, Reports, Asset Management, and Strategic Planning and Stacking will be learned and discussed.

DEA 455(4550) Research Methods in Human–Environment Relations

Fall. 3 credits. Prerequisite: DEA majors or permission of instructor; statistics course. N. Wells.

Develops students' understanding and competence in the use of research and analytical tools to study the relationship between the physical environment and human behavior. Emphasizes selection of appropriate methods for specific problems and the policy implications derived from research. Topics include research design, unobtrusive and obtrusive data-collecting tools, the processing of data, and effective communication of empirical research findings.

DEA 459(4590) Programming Methods in Design

Fall. 3 credits. Letter grades only. Minimum cost of materials: $100. L. Maxwell.

Introduction to facility programming. Emphasizes formulation of building requirements based on user characteristics and potential constraints. The course presents diverse methods for determining characteristics that will enable a particular environmental setting to support desired behaviors of users. The course emphasizes selection of appropriate methods to suit the specific user/client needs. Students will work with an actual client to prepare a program document.

DEA 460(4600) Design City

Fall. 1 credit; may be repeated for credit. Prerequisite: DEA majors; permission of instructors. Not open to freshmen for credit. Students are required to take this course in order to participate in field study trip to a major city. Field trip fee of $115 covers cost of hotel and chartered bus; trip fee will be billed to student's bursar account. S-U grades only. K. Gibson and J. Jennings.

Field study of historic and contemporary interiors with guided tours to architectural and interior design firms, installations, exhibits, and showrooms in New York City, Toronto, or other major cities. Topics and themes change yearly. Visit http://instruct1.cit.cornell.edu/courses/dea460.

DEA 470(4700) Applied Ergonomic Methods

Spring. 3 credits. Prerequisite: DEA 325. Undergraduate sec of DEA 670; shares lec but meets for an additional hour. DEA 670 has additional readings and projects. A. Hedge.

Covers physical and cognitive ergonomics methods and techniques and their application to the design of modern work environments. Emphasizes understanding key concepts. Covers conceptual frameworks for ergonomic analysis, systems methods and processes, a repertoire of ergonomics methods and techniques for the analysis of work activities and work systems.

DEA 472(4720) Environments for Elders: Housing and Design for an Aging Population

Spring. 3 credits. Field trip fee: $20. N. Wells.

Through seminars, lectures, field trips, and service learning opportunities, students examine the relationship between older adults and the physical environment. Students gain understanding of the relevance of design characteristics to the well-being of older people; an appreciation of late-life social, cognitive, and physiological changes; as well as familiarity with a variety of housing options for late life. Visit http://instruct1.cit.cornell.edu/courses/dea472.

DEA 499(4990) Senior Honors Thesis

Fall or spring. Variable credit. Prerequisite: permission of thesis advisor and DEA director of undergraduate studies. Letter grades only.

Opportunity for DEA majors to undertake original research and scholarly work leading to the preparation of a thesis. Students work closely with their thesis advisor on a topic of interest.

DEA 600–603(6000–6030) Special Problems for Graduate Students

Fall or spring. Credit TBA. S-U or letter grades. Department faculty.

Independent advanced work by graduate students recommended by their special committee chair and approved by the head of the department and instructor.

600(6000): Special Problems. For study of special problems in the areas of interior

design, human environment relations, or facilities planning and management.

601(6010): Directed Readings. For study that predominantly involves library research and independent study.

602(6020): Graduate Empirical Research. For study that predominantly involves collection and analysis of research data.

603(6030): Graduate Practicum. For study that predominantly involves field experiences in community settings.

DEA 645(6450) Dancing Mind/Thinking Heart: Creative Problem-Solving Theory and Practice

Spring. 3 credits. Limited to 24 students. Prerequisite: graduate or advanced undergraduate standing; undergraduates must have permission of instructor. S. Danko.

Focuses on thinking processes and techniques that support creative problem solving. Examines theories of creative behavior and critical thinking. The course is highly participatory and experiential by design. Weekly discussions include hands-on applications of theories on short problems tailored to the backgrounds of the students. The primary goal is to demonstrate perceptual, emotional, intellectual, cultural, and environmental blocks to creative thinking and expand the student's repertoire of creative problem solving strategies for use in day-to-day professional practice. Case studies of creative individuals and organizations from a variety of fields are presented.

DEA 648(6480) Virtual Design, Analysis, and Representation

Fall. Variable credit; max. 4. Limited to 15 students. Prerequisite: graduate or advanced undergraduate standing; for undergraduates, DEA 302 or permission of instructor. Minimum cost of materials: $150; lab fee: $35. K. Gibson.

Advanced use of computer technology to create and analyze interior environments. Emphasizes the use of 3-D modeling, animation, photorealistic rendering, and emerging technologies to investigate dynamic design issues.

DEA 650(6500) Programming Methods in Design

Fall. 4 credits. L. Maxwell.

Intended for graduate students who want a more thorough introduction to programming methods than is provided by DEA 459. Each student is required to attend DEA 459 lectures, complete all required readings, meet with the instructor and with other graduate students. An additional programming project will be required for all graduate students.

DEA 651(6510) Human Factors: Ergonomics-Anthropometrics

Fall. 4 credits. Recommended: DEA 150 and 3-credit statistics course. A. Hedge.

Intended for graduate students who want a more thorough grounding in human factors than is provided by DEA 325. Each student is required to attend DEA 325 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For more detail, see DEA 325.

DEA 652(6520) Human Factors: The Ambient Environment

Spring. 4 credits. Recommended: DEA 150. A. Hedge.

Intended for graduate students who want a more thorough grounding in human factors considerations than is provided by DEA 350. Each student is required to attend DEA 350 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For detailed description, see DEA 350.

DEA 653(6530) Planning and Managing the Workplace

Fall. 4 credits. Prerequisite: graduate standing. Letter grades only. F. Becker.

Through lectures, readings, and a field studies project, this course explores how the planning, design, and management of health care facilities affects the experience of patients and care-giving staff; and the relationship of these outcomes to quality of health measures. Invited lecturers from around the country and world (via videoconferencing) provide a broad-based perspective into different approaches to hospital planning and design, and how the form of hospitals is changing in response to new information and medical technologies, changing work patterns, and shifting demographic patterns. Students' field projects involve analysis of an actual health care setting and the development of innovative solutions to improve the quality of health care provided in it.

DEA 654(6540) Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: graduate students in facility planning and management; DEA 459/650 or permission of instructor. Letter grades only. Minimum cost of materials: $200. W. Sims. Visit http://courseinfo.cit.cornell.edu/courses/dea354-654.

For description, see DEA 354.

DEA 656(6560) Research Methods in Human-Environment Relations

Fall. 4 credits. Prerequisite: DEA majors or permission of instructor; statistics course. N. Wells.

Intended for graduate students who want a more thorough understanding of the use of research to study the relationship between physical environment and human behavior than is provided by DEA 455. Each student is required to attend DEA 455 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For more detail, see DEA 455.

DEA 659(6590) Introduction to Facility Planning and Management

Fall. 1 credit. For graduate students interested in careers in facility planning and management. Letter grades only. F. Becker.

Introduction to the field of facility planning and management. Focuses on how the planning, design, and management of an organization's physical facilities can help it meet its business objectives. Topics include the history of the field, strategic planning, space planning and design, project management, building operations, workplace change management, real estate and computer-aided facility management systems.

DEA 660(6660) The Environment and Social Behavior

Fall. 4 credits. Prerequisite: DEA 150 and written permission of instructor. Field trip fee: $65. G. Evans.

This course is about architecture and human behavior. It is centered on two key principles: 1. the complex interplay of social and personal factors with the physical environment largely determines how the built environment influences human well-being; 2. aesthetics is not sufficient in judging design—we must also consider how the built environment affects health, interpersonal relationships, and performance along with preference. Two major projects, one in collaboration with a design studio and a real community client.

DEA 661(6610) Environments and Health

Spring. 3 credits. N. Wells.

Examines the impact of the physical environment on human health and well-being through the life course. Environmental factors examined include characteristics of the built and natural environment, housing, and neighborhood as well as sprawl, the dominance of the automobile, and patterns of American landscape development. Health outcomes include physical health, obesity, mental health, and cognitive functioning. Working within the life course perspective, the course focuses particularly on environmental factors that may act as either protective mechanisms fostering the long-term resilience of individuals or risk factors contributing to long-term vulnerability.

DEA 668(6680) Design Theory and Criticism Seminar

Spring. 4 credits. Limited to 15 students. Letter grades only. J. Jennings.

For advanced undergraduate and graduate students. The seminar explores two methods of design thinking: theoretical and critical. One method stems from a desire to understand historical theory and to assess the relevance of theory as an intellectual basis for contemporary design. The other approach involves learning to write critically. Within this construct is the notion that every design is an argument a designer makes.

DEA 670(6700) Applied Ergonomics Methods

Spring. 4 credits. Limited to 20 students. Prerequisite: DEA 651. A. Hedge.

Intended for graduate students who want a more thorough understanding of applied ergonomics methods than is provided by DEA 470. Each student is required to attend DEA 470 lectures, meet with the instructor and other graduate students for an additional class each week, and complete additional readings and projects. For further detail, see DEA 470.

DEA 899(8990) Master's Thesis and Research

Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S-U or letter grades. DEA graduate faculty.

FIBER SCIENCE & APPAREL DESIGN

A. Lemley, chair (209 MVR, 255-3151);
C. C. Chu, director of graduate studies;
N. Breen, director of undergraduate studies;
S. Ashdown, C. Coffman, M. Frey,
J. Hinestroza, C. Jirousek, V. D. Lewis,
S. Loker, F. Mete, A. Netravali, S. K. Obendorf,
A. Racine

FSAD 114(1140) Introduction to Computer-Aided Design
Fall. 3 credits. Limited to 14 students per sec. Priority given to FSAD students. S-U or letter grades. Minimum cost of materials: $80. A. Racine.
Studio course that explores the creative potential of microcomputers. Uses AutoCAD software program as a design tool for generating a wide variety of visual images. Introduces basic Photoshop software commands. Includes daily hands-on demonstrations and studio work. Students develop two- and three-dimensional designs based on historical, cultural, and museum sources for portfolios and display.

FSAD 117(1170) Fashion Graphics (Drawing the Clothed Figure)
Spring. 3 credits. Limited to 21 students. Priority given to apparel design students. Prerequisite: basic drawing course. Letter grades only. Minimum cost of supplies: $125; lab fee: $30. V. D. Lewis.
Students develop both familiar and unfamiliar methods that enable them to draw the fashioned body and ancillary expressions of fashion. Drawing is explored as a communicative medium for visual research and as a creative tool for image creation.

FSAD 125(1250) Art, Design, and Visual Thinking
Fall. 3 credits. S-U or letter grades. C. Jirousek.
Introduction to the visual arts and design that explores aesthetic and cross-cultural dimensions of visual experience. Augmented by slide presentations, artifacts, video, and an Internet-based electronic textbook, lectures emphasize the varieties of visual expression seen in works of art and design. Discusses social, cultural, and historic interpretations of visual expression.

FSAD 135(1350) Fibers, Fabrics, and Finishes
Spring. 3 credits. S-U or letter grades. A. Netravali.
Introduction to fibers, fibrous materials, and dyes and finishes. Gives special emphasis to the use of fibrous materials in apparel, residential and contract interiors, and industrial applications. Topics include fiber properties, fabric structure, coloration of fibrous materials, dimensional stability, flammability, product specifications, and performance standards.

FSAD 136(1360) Fiber and Yarn Analysis Laboratory
Spring. 1 credit. Corequisite: FSAD 135. Letter grades only. A. Netravali.
Consists of 14 laboratory sessions, in which students learn techniques to identify and test fibers and yarns. A midterm and final exam are based on using the methods learned to identify an unknown fiber (midterm) and an unknown bi-component yarn (final).

FSAD 145(1450) Introduction to Apparel Design
Spring. 4 credits. Limited to 30 students; 15 per lab. Priority given to FSAD students and students transferring into FSAD. Prerequisite: FSAD 114. Letter grades only. Apparel design majors should take course during first year. Minimum cost of materials: $200. A. Racine.
Intensive study of principles and processes of flat-pattern design with emphasis on creative expression in children's apparel. Students develop an understanding of the techniques needed to produce apparel from sketches, including patternmaking and garment assembly.

FSAD 237(2370) Structural Fabric Design
Fall. 3 credits. Prerequisite: FSAD 135. Recommended: college algebra. S-U or letter grades. M. Frey.
Covers the elements of technical fabric design with an emphasis on woven and knitted fabrics. Topics include structure of woven and knitted fabrics, openness, manufacturability, equivalence, and color effects.

FSAD 264(2640) Draping
Fall. 4 credits. Limited to 30 students; 15 per lab. Prerequisites: FSAD 125 and 145. Recommended: drawing course. Letter grades only. Minimum cost of materials: $250; lab fee: $10. S. Ashdown.
This studio course examines the process of creating a three-dimensional garment from the two-dimensional fabric. The principles and processes of draping, advanced flat pattern making, and fitting are studied through projects. Drawing exercises focus on the communication of three-dimensional garments in two-dimensional sketches. Assigned problems require students to make judgments regarding the design process, the nature of materials, body structure, function, and fashion.

FSAD 265(2650) Apparel Patternmaking
Spring. 3 credits. Limited to 30 students. Prerequisites: FSAD 114, 117, 125, 145, and 135 (may be taken concurrently). Letter grades only. Minimum cost for fabrics, studio, and portfolio supplies: $250. A. Racine.
The goal of this apparel studio course is to expand student competencies in flat pattern design and analysis and fitting techniques. Students generate original design concepts using fashion sources from historic to contemporary times. The Cornell Costume Collection is used for inspiration and instruction. Full-scale samples in various levels of completion, from paper patterns to muslins to finished garments, include detailed technical drawings for portfolios.

FSAD 266(2660) Apparel Design: Product Development
Spring. 3 credits. Prerequisites: FSAD 114, 145; and FSAD 117 and 265 (may be taken concurrently). Letter grades only. Minimum cost of materials: $250; lab fee: $10. S. Ashdown.
Project-based course in which students explore the relationship between technology and design. Students learn computer-aided patternmaking, grading, manufacturing technologies, communication of technical details, flats, specifications, and costing of garments and how those factors affect design. Designs are developed to various stages from conceptual work to final garment.

FSAD 300(3000) Special Studies for Undergraduates
Fall or spring. Credit TBA. Staff.
Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the college registrar's office. The form, signed by both the instructor directing the study and the department chair, is filed at course registration or during the change-of-registration period.

FSAD 325(3250) Color and Surface Design of Textiles
Fall. 4 credits. Was FSAD 225. Limited to 18 students. Priority given to FSAD apparel design majors. Recommended: FSAD 114 and 135. Minimum cost of materials: $100; lab fee: $75. C. Jirousek.
Studio experience in the surface design of textiles combined with exercises in color theory. Textile projects use techniques such as block printing, shibori, batik, silk painting, silk screen, and stitchery to produce a portfolio of textile designs. Studio work is augmented by lectures on pattern and color theory illustrated by slides and textile examples.

FSAD 335(3350) Fiber Science
Fall. 3 credits. Limited to 20 students. Prerequisites: college chemistry and physics. S-U or letter grades. A. Netravali.
Covers fibers commonly used in various engineering, medical, and apparel applications. Topics include the nature of polymer molecules, the chemical structure of organic fibers, inorganic fibers, micro-macro structure of fibers, fiber dimensions, environmental effects, and mechanical, optical, thermal, and frictional properties of fibers. The following fiber uses are discussed: composites in aerospace and other structural components, circuit boards, bulletproof vests, sutures, artificial arteries, geotextiles, sporting goods, and others.

[FSAD 336(3360) Fundamentals of Color and Dyeing
Fall. 3–4 credits. 3 credits for lec only; 4 credits for lec and lab. Fiber science students required to take lab. Prerequisite: college natural science requirements. S-U or letter grades. Lab fee: $15. Next offered 2008–2009. C. C. Chu.
Theories and scientific principles of color for design, marketing, or research. Addresses how colorants are used to dye fabrics. Includes guest lecturers from the industry.]

FSAD 346(3460) Design Process
Fall. 4 credits. Limited to 30 students. Prerequisites: FSAD 135, 145, 264, and 265. Letter grades only. Minimum cost of materials: $250; lab fee: $10. V. D. Lewis.
Exposition of the methods used by the creative fashion designer. Aims to develop students' personal handwriting as designers. Unites a provocative design issue with the requirement of functionality and emphasizes pattern cutting as a way of realizing design ideas.

FSAD 369(3690) Style, Fashion, and the Apparel Industry
Fall. 2 credits. Limited to 30 students. Not open to freshmen. Prerequisites: FSAD 125, 135, and 237. Students should not take FSAD 369 and FSAD 346 in same semester. Letter grades only. A. Racine.

Illustrated lectures focus on changes in the U.S. apparel industry and fashion from the 19th century to the present day resulting from social forces, technological developments, and shifting demographics. The Cornell Costume Collection is used for discussion. Students write a term paper on issues relating to style and the fashion industry.

FSAD 370(3700) History of Color and Design in Textiles
Fall. 3 credits. Prerequisite: FSAD 125 or permission of instructor. S-U or letter grades. Offered alternate years. C. Jirousek.
Explores color theory principles, color trends, science and technology of color measurement, color and design in textile construction and embellishment, design use of pigments and dyes, and history of textile design as a designer resource. Students complete hands-on exercises, two exams, and a paper.

FSAD 400–401–402–403(4000–4010–4020–4030) Special Independent Studies for Undergraduates
Fall, summer, or spring. Credit TBA. S-U or letter grades. Staff.
For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of FSAD not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration along with an add/drop slip in the college registrar's office (146 MVR). To ensure review before the close of the course registration or change-of-registration period, early submission of the special-studies form to the department chair is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

FSAD 400(4000): Directed Reading. For study that predominantly involves library research and independent reading.

FSAD 401(4010): Empirical Research. For study that predominantly involves data collection and analysis, or laboratory or studio projects.

FSAD 402(4020): Supervised Fieldwork. S-U grades only. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

FSAD 403(4030): Teaching Apprenticeships. Fall or spring. 2–4 credits. Prerequisites: upperclass standing, demonstrated high level of performance in subject to be taught and in overall academic program, and permission of instructor and department chair. S-U or letter grades. Staff. Apprenticeship includes both a study of teaching methods in the field and assisting the faculty with instruction.

FSAD 431(4310) Apparel Production and Management
Spring. 3 credits. Limited to 40 students. Prerequisites: ECON 101 and 102 and upper-division course in either apparel or textiles. S-U or letter grades. F. Mete.
Introduction to the global textile and apparel industry, particularly the technical and economic aspects of apparel production. Includes analysis of specific apparel manufacturing and management issues such as international sourcing, Quick Response, mass customization, production and information technology, labor, and logistics.

FSAD 432(4320) Product Quality Assessment
Spring. 3 credits. Limited to 36 students in lec, 18 per lab. Prerequisites: FSAD 135 and statistics course. S-U or letter grades. Lab fee: $15. N. Breen.
Covers evaluation of fibers, yarns, fabrics, and garments, with emphases on the meaning of standards, testing philosophy, quality control, and statistical analysis. Discusses day-to-day tests done in the textile and apparel industry. Laboratory sections introduce students to various test methods, data generation for analysis, and evaluation.

FSAD 436(4360) Fiber Chemistry
Fall. 3 credits. Prerequisite: senior or first-year graduate standing. S-U or letter grades. Offered alternate years. C. C. Chu.
Discusses the chemical and physical structure of several commercially important fibers, such as cotton, wool, silk, polyesters, nylons, acrylics, polyolefins, and spandex, and their polymerization process. Gives the general chemical and physical properties of each. Discusses degradation reactions for certain fibers such as polyolefins and acrylics.

[FSAD 439(4390) Biomedical Materials and Devices for Human Body Repair (also BME 539[5390])
Fall. 2–3 credits. Prerequisites: junior or senior standing; college natural science requirement (chemistry or biology). S-U grades only for 2 credits, letter grades only for 3 credits. Next offered 2008–2009. C. C. Chu.
Surveys materials and devices for repair of injured, diseased, or aged human tissues/organs.]

FSAD 444(4440) Apparel/Textile Retailing and Distribution
Fall. 3 credits. Prerequisites: junior or senior standing; FSAD 135 and marketing course. S-U or letter grades. N. Breen.
Overview of the business of design, production, distribution, marketing, and merchandising of apparel and related products from a management perspective. Includes the organization and structure of both domestic and international retailers along with pricing strategies, merchandise planning, inventory management, and sales promotion. New uses of computer systems and information technologies are emphasized throughout.

FSAD 466(4660) Textiles, Apparel, and Innovation
Fall. 3 credits. Prerequisite: FSAD 237. Recommended: FSAD 432. S-U or letter grades. Cost of field trip: $100. Offered alternate years. J. Hinestroza.
Designed for students in all FSAD options. Explores the relationship between materials and design with a concentration on the use of innovative textile materials in apparel. Both aesthetic and functional issues are addressed. The course consists of a combination of lecture, discussion of readings, oral reports, a research paper, and project work. There is a one-day field trip to New York City.

FSAD 470(4700) Fashion Presentation: Portfolio Development
Fall. 3 credits. Limited to 25 students. Prerequisites: FSAD 117, 264, 265, and 346. Minimum cost of materials: $250. V. D. Lewis.
Students gain an understanding of presentation methods currently used by fashion designers, runway illustrative journalists, forecasting artists, and fashion editorial illustrators. Skills in fashion illustration, image manipulation, and photography are developed. To satisfy personal philosophies of fashion, students discover and adopt current presentation techniques with new and original effects. Students must bring all past project work for possible inclusion in the portfolio.

FSAD 499(4990) Honors Thesis Research
Fall and spring. 1–6 credits; max. 6 credits for graduation. Prerequisite: FSAD students admitted to college honors program. S-U or letter grades. Staff.
Independent research leading to the honors thesis. Students must follow college honors program guidelines.

FSAD 600(6000) Special Problems for Graduate Students
Fall or spring. Credit TBA. S-U or letter grades. Staff.
Independent advanced work by graduate students recommended by their chair and approved by the department chair and instructor.

[FSAD 616(6160) Rheology of Solids: Dynamic Mechanical Analysis of Fibers and Polymers
Spring. 3 credits. S-U or letter grades. Offered alternate years; next offered 2008–2009. J. Hinestroza.
Introduction to dynamic mechanical analysis and its relevance in the characterization of pplymer fibers and films.]

[FSAD 620(6200) Physical Properties of Fiber-Forming Polymers and Fibers
Spring. 3 credits. Prerequisite: permission of instructor. Offered alternate years; next offered 2008–2009. A. Netravali.
Covers formation and properties of fiber-forming polymers, their states and interconnection. Discusses relationship between chemical structure and morphology of fibers on their properties and testing methods.]

[FSAD 626(6260) The Chemistry of Textile Finishes and Dyeing
Spring. 3 credits. Prerequisites: FSAD 336 or equivalent and organic chemistry course or permission of instructor. S-U optional. Offered alternate years; next offered 2008–2009. C. C. Chu.
Studies industrially important textile chemicals used for dyeing and enhancing fiber and fabric properties, such as durable press, anti-soiling, water repellency.]

FSAD 637(6370) Research Seminars in Apparel Design
Fall and spring. 1 credit; repeat of course each semester encouraged for all apparel design graduate students. Prerequisites: permission of individual instructor for advanced undergraduates. S-U grades only. Apparel Design faculty.

FSAD 639(6390) Mechanics of Fibrous Assemblies
Fall. 3 credits. Prerequisite: solid mechanics course or permission of instructor. S-U or letter grades. Offered alternate years. J. Hinestroza.
Studies the mechanics of fiber assemblies: idealized yarn and fabric models; statistical bundle theories; deformation of yarns and fabrics in tensile, shear, and compressive stress; bending and buckling; and the mechanical behavior of nonwoven textile materials.

[FSAD 664(6640) Human Factors: Anthropometrics and Apparel
Fall. 3 credits. Open to advanced undergraduates. Prerequisites: statistics course and permission of instructor. S-U or letter grades. Offered alternate years; next offered 2008–2009. S. Ashdown.
Seminar course focusing on anthropometrics, sizing and fit of clothing, development of grading and sizing systems, and the impact of new technologies on apparel distribution.]

FSAD 666(6660) Fiber Formation: Theory and Practice
Spring. 3 credits. Prerequisites: polymer chemistry, college physics, FSAD 436, 620, or permission of instructor. S-U or letter grades. Offered alternate years. M. Frey.
Covers the practical and theoretical analysis of the chemical and physical principles of the methods of converting bulk polymer to fiber; rheology; melt, dry, and wet polymer spinning; fiber drawing; heat setting; and general theory applied to unit processes.

FSAD 670(6700) Fashion Theory
Spring. 3 credits. Limited to 25 students. Prerequisite: FSAD 346 for undergraduates or similar course for graduates. Letter grades only. Offered alternate years. Minimum cost of materials: $250. V. D. Lewis.
Provides students with the theoretical tools that will enable them to conduct debates and create strategy about the design of fashion. Debates support visual outcomes, conceptual foundations, and methodologies that are unequivocal in practice, criticism, education, management, and the cultural context of fashion design.

FSAD 675(6750) Aesthetics and Meaning in World Dress
Spring. 3 credits. Prerequisites: FSAD 125 or course in history of art, costume history, or other history. S-U or letter grades. Offered alternate years. C. Jirousek.
Examines the aesthetic and social/psychological relationship between body and clothing in the context of various cultures. Students develop a research topic to be presented orally and in a term paper, and they participate in the development of an exhibition.

FSAD 899(8990) Master's Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S-U or letter grades. Staff.

FSAD 999(9990) Doctoral Thesis and Research
Fall or spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S-U or letter grades. Staff.

HUMAN DEVELOPMENT

R. Savin-Williams, chair; B. Koslowski, director of graduate studies; E. Wethington, director of undergraduate studies; M. Belmonte, C. Brainerd, M. Casasola, S. Ceci, M. Cochran, S. Cornelius, R. Depue, J. Eckenrode, G. Evans, S. Hamilton, C. Hazan, B. Lust, J. Mikels, A. Ong, K. Pillemer, V. Reyna, S. Robertson, J. Ross-Bernstein, C. Schelhas-Miller, E. Temple, Q. Wang, W. Williams. Emeritus: J. Brumberg, J. Doris, H. Ricciuti

HD 115(1150) Human Development
Fall or summer. 3 credits. S-U or letter grades. C. Schelhas-Miller.
Provides a broad overview of theories, research methods, and current knowledge of human development from conception to adulthood. Covers infancy, childhood, and adolescence. Topics include biological, cognitive, language, social, and emotional development as well as the cultural, social, and interpersonal contexts that affect the developmental processes and outcomes of these domains.

HD 116(1160) Section for Introduction to Human Development
Fall or summer. 1 credit. Enrollment in fall limited to HD majors. Enrollment in fall and summer limited to students enrolled in HD 115. Letter grades only. C. Schelhas-Miller.
HD 115 introduces students to the basic concepts, theories, and research in human development as they explain prenatal development and development in infancy, childhood, and adolescence. The focus is on individual development from an interdisciplinary perspective with an emphasis on psychological development, but also drawing from the fields of sociology, history, biology, anthropology, and education. HD 116 provides an opportunity to discuss material in more depth in a small group. Students learn to read and critique empirical research articles and discuss the application and policy implications of course topics.

HD 216(2160) Adolescence and Emerging Adulthood
Spring. 3 credits. Prerequisite: HD 115 or PSYCH 101 or permission of instructor. S-U or letter grades. C. Schelhas-Miller.
Broad overview of theories, research, and issues in the study of human development during adolescence and emerging adulthood. Focuses on the major biological, cognitive, and social changes during adolescence; the psychosocial issues of adolescence, including identity, autonomy, intimacy, sexuality, achievement, and problems; and the contexts in which adolescent development occurs, particularly families, peer groups, schools, work, and popular culture. Discusses empirical research, theories, case studies of the lives of real adolescents, and, to a lesser degree, public policies.

[HD 218(2180) Human Development: Adulthood and Aging
Fall. 3 credits: Prerequisite: HD 115. S-U or letter grades. Next offered 2008–2009. A. Ong.
General introduction to theories and research in adult development and aging. Discusses psychological, social, and biological changes from youth through late adulthood. Emphasizes both individual development within generations and differences among generations.]

[HD 220(2200) The Human Brain and Mind: Biological Issues in Human Development (also COGST 220[2200])]

HD 230(2300) Cognitive Development (also COGST 230[2300])
Spring. 3 credits. Prerequisite: HD 115 or PSYCH 101. Q. Wang.
Surveys current theory and research on various aspects of cognitive development across the life span, with emphasis on infancy and early childhood. Topics include perception, representation and concepts, reasoning and problem solving, social cognition, memory, metacognition, language and thought, and academic skills. Students develop a broad understanding of the mechanisms, processes, and current issues in cognitive development and learn to critically assess developmental research. The course is a combination of lecture, seminar, and fieldwork.

HD 233(2330) Children and the Law
Spring. 3 credits. Prerequisites: HD 115 and introductory statistics course. S. Ceci.
Examines psychological data and theories that shed light on the practical issues that arise when children enter the legal arena. Attempts to integrate theories, research, and methodology from several areas of psychology, including developmental, cognitive, social, and clinical. Also attempts to examine the degree to which basic research can (and should) be used to solve applied issues. Selected topics include memory development, suggestibility, theory of mind, childhood amnesia, expectancy formation, symbolic representational ability, and finally, what can (or should) an expert witness tell the court. Several actual cases involving child witnesses are presented to illustrate the application of scientific data to the courtroom. Because of the heavy use of case materials and video and textual coverage of actual trials, it is expected that students will devote more than the usual number of hours to this course.

HD 238(2380) Thinking and Reasoning (also COGST 238[2380])
Fall. 3 credits. Prerequisite: HD 115 or PSYCH 101. B. Koslowski.
Examines problem solving, transfer, and creativity; pre-causal and causal reasoning; models of good thinking based on formal logic, pragmatic syllogisms, and probability theory; expert-novice differences; cognition and attitudes; extra-rational and magical beliefs; and putative racial and social class differences in intelligence. Two general themes run through the course: (1) the extent to which children and adults approximate the sorts of reasoning that are described by various psychological models; (2) the extent to which various models accurately describe the kind of thinking that actually is required by the problems and issues that arise and must be dealt with in the real world.

[HD 250(2500) Families and the Life Course (also SOC 250[2500])]

HD 251(2510) Social Gerontology: Aging and the Life Course (also SOC 251[2510])
Spring. 3 credits. Prerequisites: HD 115, SOC 101, D SOC 101, or PSYCH 101. S-U or letter grades. E. Wethington.
Analyzes the social aspects of aging in contemporary American society from a life course perspective. Topics include (1) an

introduction to the field of gerontology, its history, theories, and research methods; (2) a brief overview of the physiological and psychological changes that accompany aging; (3) an analysis of the contexts (e.g., family, friends, social support, employment, volunteer work) in which individual aging occurs, including differences of gender, ethnicity, and social class; and (4) the influences of society on the aging individual.

HD 260(2600) Introduction to Personality (also PSYCH 275[2750])
Fall. 3 credits. Recommended: introductory psychology or human development course. V. Zayas.
Introduction to theory and research in the area of personality psychology, with special emphasis on personality development. Covers the major influences—including genetic, environmental, and gene-environment interactions—and involves in-depth study of the major theories. Examines and compares assumptions and models of human behavior that form the basis of each theoretical orientation, and reviews and evaluates the relevant empirical evidence. In addition, basic psychometric concepts and the methods for measuring and assessing personality are covered, as are the major related debates and controversies.

HD 261(2610) The Development of Social Behavior
Fall. 3 credits. Highly recommended: HD 115 or PSYCH 128. J. Mikels.
Views issues in the development of social behavior from the perspective of theory and research. Likely topics include bases of social behavior across the life span, the role of parents, siblings, and peers, the development of prosocial and aggressive behavior, the development and functioning of attitude and value systems, moral development, emotional development, and the function and limits of experimental research in the study of social development.

HD 282(2820) Community Outreach (also PSYCH 282[2820])
Fall. 2 credits. Prerequisites: HD 115 or PSYCH 101. Students may not register concurrently with HD 327/PSYCH 327 or 328. Letter grades only. H. Segal.
For description, see PSYCH 282.

HD 311(3110) Educational Psychology (also EDUC 311[3110])
Fall. 4. credits. S-U or letter grades. D. Schrader.

HD 319(3190) Memory and the Law
Fall. 3 credits. Prerequisites: HD 115 or PSYCH 101 or HD 233 or PSYCH 265. S-U or letter grades. C. Brainerd.
This course will focus on how the scientific study of human memory interfaces with the theory and practice of law. Students will study relevant areas of memory research (e.g., storage, retrieval, false memory, memory deficits in impaired populations) and memory theory. Students will also study specific areas of legal practice in which the reliability of evidence is critically dependent on human memory (e.g., eyewitness identification, recovery of repressed traumatic memories, confessions, elderly witnesses, child witnesses). Readings will come from leading textbooks on these topics and also from primary sources.

[HD 320(3200) Human Developmental Neuropsychology]

HD 327(3270) Field Practicum I (also PSYCH 327[3270])
Fall. 3 credits. Limited to 30 students. Students must commit to taking HD 328 in spring semester. Prerequisites: HD 370 or PSYCH 325 and permission of instructor. Letter grades only. H. Segal.
For description, see PSYCH 327.

HD 328(3280) Field Practicum II (also PSYCH 328[3280])
Spring. 3 credits. Limited to 30 students. Prerequisites: HD 327/PSYCH 327 taken previous semester, PSYCH 325 or HD 370 and permission of instructor. Letter grades only. H. Segal.
For description, see PSYCH 328.

HD 334(3340) The Growth of the Mind (also COGST 334[3340])
Spring. 4 credits. Recommended: course in human experimental psychology, statistics, or HD 115 or equivalent, or permission of instructor. S-U or letter grades. B. Lust.
Introduces the fundamental issues of cognition. Students are asked to consider several questions. What is the nature of human intelligence? How are knowledge and understanding acquired and represented in the human mind? What is the nature of mental representation? What are the cognitive characteristics of the mind at birth? What is the relation of the acquisition of knowledge and understanding to their final representation? What are the relations between language and thought? In the study of those issues, how can epistemology and experimental psychology be related through the experimental method? Basic debates within the study of cognition are introduced and discussed throughout. The course analyzes Piaget's comprehensive theory of cognitive development and experimental results. Current research in cognitive development is contrasted.

[HD 336(3360) Connecting Social, Cognitive, and Emotional Development]

[HD 337(3370) Language Development (also COGST 337[3370], PSYCH 337[3370], LING 337[3370])]

HD 342(3420) Participation with Groups of Young Children
Fall. 4 credits. Limited to 25 students. Prerequisites: HD 115 and contact with instructor to arrange placement hours. S-U or letter grades. J. Ross-Bernstein.
Designed to integrate developmental theories with supervised experience in local care and educational contexts for young children, the intention being to enhance the student's abilities to understand and to relate effectively to young children. Students are required to participate six hours per week in a setting with young children. Placements are in local pre-kindergarten and kindergarten programs, day care centers, nursery schools, and Head Start programs.

Note: Six hours of placement per week (completed in two 3-hour blocks of time) are required. For your information: students select ONE of the following placement options: M W (8–11 or 9–12), M F (8–11 or 9–12), T R (8–11 or 9–12), M F (11–2), T R (11–2). A few late-afternoon placements are available M F (2:30–5:30), T R (2:30–5:30).

HD 343(3430) Social Worlds of Childhood
Spring. 4 credits. Limited to 25 students. Prerequisite: HD 115. S-U or letter grades. J. Ross-Bernstein.
This course explores the nature, quality, and impact of relationships of school-age children (ages 5–11) in multiple contexts (e.g. school, home, community). Course work is grounded in ecological theory. Paths of inquiry include (1) who and what play critical roles in children's diverse lives, (2) how are these relationships relevant to school-age children's socialization, and (3) what are the processes by which individuals acquire the knowledge, skills, and character traits that enable them to participate as effective members of groups and society. Study of systems and relationships that impact the child will be organized according to person, process, context, and outcome. Students are required to participate 4 hours per week in a setting with school-age (5–11) children.

HD 344(3440) Infant Behavior and Development
Fall. 3 credits. Limited to 60 students. Not open to freshmen. Prerequisites: HD 115, biology course, and statistics course. S. Robertson.
Examines behavior and development from conception through the first two years of life in traditional areas (e.g., perception, cognition, socioemotional theory, language, motor function). Strongly emphasizes the fundamental interconnectedness of these aspects of development as well as their relation to the biology of fetal and infant development. Emphasizes topics with implications for general theories of development (e.g., the functional significance of early behavior, the nature of continuity and change, and the role of the environment in development). Also describes conditions that put infants at risk for poor development (e.g., premature birth, exposure to environmental toxins, maternal depression) and topics with current social, ethical, or political implications (e.g., infant day care, fetal rights). Research methodology in the study of early behavior and development is emphasized throughout the course.

HD 346(3460) The Role and Meaning of Play
Fall. 3 credits. Limited to 45 students. Prerequisite: junior or senior standing; HD 115. J. Ross-Bernstein.
Examines the play of children ages three through seven. Through seminar discussions, workshops, videos, and individualized research students explore the meaning and validity of play in the lives of young children, the different ways that children play and the value of each, and the effect of the environment in enhancing and supporting play.

[HD 347(3470) Human Growth and Development: Biological and Behavioral Interactions (also B&SOC 347[3471], NS 347[3470])]
Spring. 3 credits. Limited to 150 students. Prerequisites: BIO G 101 or 109 or equivalent, and HD 115 or PSYCH 101. Offered alternate years; next offered 2008–2009. S. Robertson and J. Haas.
Concerned with the interrelationships of physical and psychological growth and development in humans during infancy. Considers intrinsic and extrinsic causes of variations in growth, including various forms

of stimulation. Also examines the consequences of early growth and its variations for current and subsequent behavioral, psychological, and physical development. The interaction between physical and behavioral or psychological factors is emphasized throughout the course.]

HD 353(3530) Risk and Opportunity Factors in Childhood and Adolescence

Fall. 3 credits. Limited to 100 students. Prerequisites: HD 115 and 250. S-U or letter grades. J. Whitlock.

Explores the meaning of risk and opportunity in the lives of children and youth. Begins with understanding risk accumulation and resilience as they relate to social policy, professional practice, and community development. The concept of "social toxicity" is a central theme of the course. Assignments include writing research-based editorials and participating in a simulated public policy debate.

HD 362(3620) Human Bonding

Fall. 3 credits. Limited to 600 students. Recommended: introductory psychology or human development course. S-U or letter grades. C. Hazan.

Covers the science of interpersonal relationships. Examines the basic nature of human affectional bonds, including their functions and dynamics. Covers such topics as interpersonal attraction and mate selection, intimacy and commitment, love and sex, jealousy and loneliness, the neurobiology of affiliation and attachment, and the role of relationships in physical and psychological health.

HD 366(3660) Emotional Functions of the Brain

Spring. 3 credits. Prerequisites: HD 220, PSYCH 223/460. Letter grades only. R. Depue.

After an presenting an overview of the gross neuroanatomy of the primate brain, this course focuses on networks of brain regions that are organized around the integration of processes related to emotion and motivation. First, general features of the brain in relation to emotional evaluation and expression processes are discussed, and then the brain organization related to several specific types of emotional systems is presented, including social bonding, fear versus anxiety and affective aggression. Emotion, memory, and conscious awareness of emotional feelings are also discussed.

HD 370(3700) Adult Psychopathology (also PSYCH 325[3250])

Spring. 3 credits. Prerequisites: sophomore, junior, or senior standing; any course in psychology or human development. H. Segal.

For description see PSYCH 325.

[HD 382(3820) Research Methods in Human Development]

HD 384(3840) Gender and Sexual Minorities (also FGSS 385[3850])

Fall. 3 credits. Prerequisite: social science course. S-U or letter grades. K. Cohen.

Introduces students to theories, empirical scholarship, and current controversies regarding lesbian, gay, bisexual, transgender, sexually questioning, and other gender and sexual minority populations. The major focus is on sexual development, lifestyles, and communities with additional coverage of ethnic, racial, and gender issues. Videos supplement readings and lectures.

HD 400–401–402–403(4000–4010–4020–4030) Special Studies for Undergraduates

Fall or spring. Credit TBA; 1–4. Prerequisite: permission of instructor. S-U or letter grades.

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of HD not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the department office in G77 MVR. This form must be signed by the instructor directing the study and the student's faculty advisor and submitted to G77 MVR, the Office of Undergraduate Education. After the form is approved, the student takes it to the college registrar's office, 146 MVR. To ensure review before the close of the periods, early submission of the special studies form to the Office of Undergraduate Education is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

400(4000): Directed Readings. Prerequisite: permission of instructor. For study that predominantly involves library research and independent study.

401(4010): Empirical Research. Prerequisite: permission of instructor. For study that predominantly involves data collection and analysis, or laboratory or studio projects.

402(4020): Supervised Fieldwork. Prerequisite: permission of instructor. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

403(4030): Teaching Assistantship. Prerequisites: permission of instructor; juniors and seniors with minimum 3.0 GPA; either HD 115, or PSYCH 101, and two intermediate-level HD courses, or equivalent courses in psychology or sociology. Students must have taken course and received B+ or higher. For study that includes assisting faculty with instruction.

HD 414(4140) Social and Psychological Aspects of the Death Penalty

Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing and HD 115 and HD 233 or PSYCH 265. S-U or letter grades. C. Brainerd.

This course will focus on how the field of human development contributes to death penalty cases through the creation of social history reports on death-qualified defendants and will provide training in how to prepare such reports. Students will study relevant areas of death penalty law (e.g., Wiggins v. Smith, mitigation law, pre- vs. post-conviction). Students will also study specific areas of human development research that figure centrally in social history reports (e.g., intelligence testing, educational disability, mental illness and the DMS-IV, social and family environment, prediction of future dangerousness, anti-social personality).

HD 418(4180) Aging: Contemporary Issues

Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 218, 250, or 251 or permission of instructor. Letter grades only. J. Mikels.

Seminar addressing major issues and controversies in the field of aging. Designed for upper-level students who wish to pursue an in-depth analysis of concepts such as "successful" aging and wisdom. Although these issues are addressed primarily from a psychological viewpoint, interdisciplinary perspectives are considered and incorporated in both readings and discussions. Designed for advanced undergraduates who have completed an introductory course in adulthood and aging and wish to pursue such issues in more depth. Class time is devoted primarily to discussion of assigned readings.

HD 419(4190) Midlife Development

Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 218, 250, or 251 or permission of instructor. Letter grades only. Offered alternate years. A. Ong.

This seminar-style course examines the burgeoning research literature on adult development during midlife. Focuses on research and theory examining psychological changes during middle adulthood such as relativistic and dialectical thinking, personality, identity, and sense of control. Also considers the social and physical changes that occur at this time of life especially regarding issues such as empty nest anxieties, divorce, career transitions, menopause, and cardiovascular disease. Oral presentations, class participation, and an integrative paper are required.

[HD 420(4200) Laboratory in Risk and Rational Decision Making]

[HD 431(4310) Mind, Self, and Emotion]

[HD 432(4320) Cognitive, Social, and Developmental Aspects of Scientific Reasoning (also COGST 432[4320])]

HD 433(4330) Developmental Cognitive Neuroscience

Spring. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 220 or PSYCH 223, BIONB 222. S-U or letter grades. Offered alternate years. Staff.

What are the brain mechanisms underlying human behavior and cognition? How do those underlying brain mechanisms develop? These are the questions that developmental cognitive neuroscience tries to address and those explored in this course. The course explores methods used in the field (including brain imaging techniques), recent findings on the development of brain mechanisms underlying human behaviors such as language, attention, and memory, as well as the brain mechanisms that may underlie various developmental disorders such as developmental dyslexia, autism, and attention deficit (hyperactive) disorder (AD(H)D). Emphasis is on reading primary research literature and acquiring the skills to understand, critique, discuss, and write about primary research. The format includes lecture and discussion.

HD 434(4340) Current Topics in Cognitive Development

Spring. 3 credits. Limited to 20 students. Prerequisites: HD/COGST 334 or permission of instructor. S-U or letter grades. B. Lust.

This course will supplement survey course HD/COGST 334 with additional discussion of current research in the area of cognitive development. Selected current papers that debate issues discussed in HD/COGST 334 will be read and discussed in parallel with the HD/COGST 334 survey course. Modern interpretations and challenges to Piaget's theory will be evaluated in light of current literature in the field. A small-group format will be adopted to encourage discussion.

HD 437(4370) Lab Course: Language Development (also COGST/LING 450[4500], PSYCH 437[4370])
Fall. 2 credits. Limited to 20 students. Prerequisite: HD 337/COGST/PSYCH/LING 337 or equivalent. B. Lust.
For description, see COGST 450.

HD 440(4440) Internship in Educational Settings for Children
Fall or spring. 8–12 credits. Prerequisites: HD 115, 342 or 343, and 348; permission of instructor. Recommended: HD 346. S-U or letter grades. J. Ross-Bernstein.
Offers an opportunity to integrate theory with practice at an advanced level and to further develop understanding of children ages 2 to 10 and their families. Interns function as participants in varied settings and participate in curriculum planning, evaluation, staff meetings, home visits, parent conferences, and parent meetings. Supervision by head teacher and instructor. Students are expected to define their own goals and to assess their progress, to do assigned and self-directed readings, and to keep a critical incident journal.

HD 448(4480) Advanced Participation with Children
Spring. 4–8 credits. Limited to 20 students (depending on availability of placements and supervision). Prerequisites: HD 115 and 342 or 343 and permission of instructor. Recommended: HD 346. S-U or letter grades. J. Ross-Bernstein.
Supervised field-based course designed to help students deepen and consolidate their understanding of children. Students are expected to define their own goals and assess progress with supervising teachers and the instructor; to keep a journal; and to plan, carry out, and evaluate weekly activities for children within their placement. Conference groups and readings focus on the contexts of development and on ways to support children's personal and interpersonal learning. Each student is expected to do a presentation and paper on a self-selected topic within the scope of the course. Participation is in settings that serve typical and/or special needs children from three to eight years of age and provide education, care, or special-purpose interventions for them.

HD 452(4520) Culture and Human Development (also COGST 452[4520])
Fall. 3 credits. Limited to 20 students. Prerequisite: HD 115 or PSYCH 101. Open to undergraduate and graduate students. Letter grades only. Offered alternate years. Q. Wang.
This seminar takes an interdisciplinary approach to address the central role of culture in human development. It draws on diverse theoretical perspectives, including psychology, anthropology, education, ethnography, and linguistics, to understand human difference, experience, and complexity. It takes empirical reflections upon major developmental topics such as cultural aspects of physical growth and development; culture and cognition; culture and language; culture, self, and personality; cultural construction of emotion; culture issues of sex and gender; and cultural differences in pathology.

HD 457(4570) Health and Social Behavior (also SOC 457[4570])
Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; statistics course and *one* of the following: HD 250, SOC/D SOC 101, or SOC 251. Letter grades only. Offered alternate years. E. Wethington.
Critically examines theories and empirical research on the relationships among social group membership, social status, and physical and mental health. Lectures focus on social stress, social support, and socioeconomic status, all of which are associated with variations in physical health, mental health, and health maintenance behaviors. Students are expected to read widely from current literature in medical sociology, health psychology, public health, and epidemiology.

[HD 464(4640) Adolescent Sexuality (also FGSS 467[4670])]

HD 466(4660) Psychobiology of Temperament and Personality
Fall. 3 credits. Limited to 20 students. Prerequisite: permission of instructor. Letter grades only. R. Depue.
For students who have an interest in the neurobiology of behavior, in general, and in temperament and personality, in particular. The course material is presented within an evolutionary biology perspective, where the development of neurobehavioral systems as a means of adapting to critical stimuli is explored as the basis of emotional traits in humans. The nature of temperament and personality is explored from psychometric, social, genetic, and biological points of view. There is a focus on the general role played by the biogenic amines (dopamine, norepinephrine, and serotonin), corticotropic hormone, and opiates in determining individual differences in temperament and personality. Implications for modeling several forms of personality disorders and psychopathology are also discussed. Finally, the manner in which environmental influences across the life span may be coded in the brain and influence the development of personality is explored.

HD 468(4680) Stress in Childhood and Adolescence
Spring. 3 credits. Limited to 20 students. Prerequisite: junior or senior standing. Recommended: HD 115 and a statistics course. Letter grades only. J. Eckenrode.
Advanced seminar that reviews research related to the nature and consequences of stressful experiences in childhood and adolescence, particularly those arising in the family. Topics represent common stressors in the lives of children (e.g., divorce of parents) that have potentially damaging consequences for development. Also covers topics in which Cornell faculty members have conducted significant research (e.g., child abuse and neglect). In addition to considering the negative effect of stress on development, also considers issues of individual differences in stress reactivity, including the concepts of coping and resilience. These topics lead naturally into discussions of practice and policy.

HD 474(4740) Autism and the Development of Social Cognition
Fall. 3 credits. Limited to 20 seniors and juniors. Prerequisites: one statistics course AND either BIONB 222 OR one course in neuroscience beyond 200 level. S-U or letter grades. M. Belmonte.
What drives the development of social cognitive skills such as language, theory of mind, and empathy? To what extent do these capacities constitute isolable "modules," or how might they emerge from more elementary neural properties? How can understanding what goes wrong during autistic development teach us about what goes right during normal development, and about how neural and cognitive development intertwine? This seminar covers current psychological and neurobiological theories of autism, emphasizing written analysis and critical review of the primary research literature. Specific topics will be selected to match students' interests, and each student will develop and orally defend a research proposal on an open question in the neuroscience of autism or related developmental disorders.

HD 478(4780) Attention Deficit/Hyperactivity Disorder in Children
Spring. 3 credits. Limited to 15 students. Prerequisites: HD 115 or equivalent, introductory biology, statistics course. S-U or letter grades. Offered alternate years. S. Robertson.
This seminar examines in detail the nature, diagnosis, epidemiology, causes, and treatment of ADHD through a critical evaluation of the recent scientific and medical literature. Also considers implications for families, schools, and society.

HD 483(4830) Early Care and Education in Global Perspective
Fall. 3 credits. Limited to 20 students. Prerequisites: junior or senior standing; HD 115 and 250. S-U or letter grades. M. Cochran.
Examines American child care and early education policies and programs, broadly defined, in the context of policies and programs in Africa, Asia, Europe, and Latin America. Comparison and analysis are guided by several complementary conceptual frameworks. Gives particular attention to the synthesis of child care with early intervention and family support. Policy-related topics include parental leave, developmentally appropriate practices, universal pre-kindergarten, cultural diversity, parent involvement, teacher preparation, and financing the ECE system. Students specialize in the child care policies and programs of another country, work in teams to analyze a contemporary policy issue, and apply course content to an ECE issue of their choice in a final paper.

HD 498(4980) Senior Honors Seminar
Fall and spring. 1 credit. Requirement for and limited to seniors in HD honors program. S-U grades only. M. Casasola.
Discussion and presentation of honors theses being completed by HD seniors.

HD 499(4990) Senior Honors Thesis
Fall or spring. Credit TBA. Prerequisite: permission of thesis advisor and coordinator of honors program. S-U or letter grades. HD faculty.

The Graduate Program

HD graduate courses are open to undergraduates only by permission of instructor.

General Courses

[HD 602(6020) Research in Risk and Rational Decision Making]

HD 614(6140) Social and Psychological Aspects of the Death Penalty
Spring. 3 credits. Limited to 5 students. Prerequisite: Cornell doctoral students. S-U or letter grades. C. Brainerd.
This course will focus on how the field of human development contributes to death penalty cases through the creation of social history reports on death-qualified defendants and will provide training in how to prepare such reports. Students will study relevant areas of death penalty law (e.g., Wiggins v. Smith, mitigation law, pre- vs. post-conviction) and design relevant research. Students will also study specific areas of human development research that figure centrally in social history reports (e.g., intelligence testing, educational disability, mental illness and the DMS-IV, social and family environment, prediction of future dangerousness, anti-social personality).

[HD 617(6170) Adolescence]

HD 619(6190) Memory and the Law
Fall. 3 credits. Limited to 5 doctoral students. S-U or letter grades. C. Brainerd.
This course will focus on how the scientific study of human memory interfaces with the theory and practice of law. Students will study relevant areas of memory research (e.g., storage, retrieval, false memory, memory deficits in impaired populations) and memory theory. Students will also study specific areas of legal practice in which the reliability of evidence is critically dependent on human memory (e.g., eyewitness identification, recovery of repressed traumatic memories, confessions, elderly witnesses, child witnesses). Readings will come from primary library sources.

HD 620(6200) First-Year Proseminar in Human Development
Yearlong. 1 credit. Prerequisite: first-year HD graduate students. S-U grades only. B. Koslowski.
Designed as an orientation to the department and the university. Activities include attendance at research presentations, visits to departmental research laboratories, relevant informational sessions (e.g., University Committee on Human Subjects, College Grants), and guidance in preparing a public research presentation to be made at the end of spring semester.

HD 621(6210) Seminar on Autobiographical Memory
Fall. 3 credits. Prerequisites: graduate standing; seniors by permission of instructor. Letter grades only. Q. Wang
This graduate seminar is designed to give an overview as well as in-depth analysis of topics related to autobiographical memory and its development. Readings focus heavily on current theories and empirical research on a wide range of topics including childhood amnesia, reminiscence bump, emotion and memory, memory accuracy, development and disruption, neurological perspectives, memory functions, and memory across cultures.

[HD 631(6310) Proseminar on Cognitive Development]

[HD 632(6320) Cognitive Neuroscience Seminar: Applications of Brain Science to Behavioral Research]

HD 633(6330) Language Acquisition Seminar (also COGST 633[6330], LING 633[6330])
Fall. 1–4 credits. Prerequisite: 337 or equivalent or permission of instructor. S-U or letter grades. B. Lust.
This seminar reviews and critiques current theoretical and experimental studies of first language acquisition, with a concentration on insights gained by cross-linguistic study of this area. Attention is also given to the development of research proposals.

[HD 634(6340) Judgment, Decision Making, and Scientific Reasoning]

HD 636(6360) Connecting Social, Cognitive, and Emotional Development
Fall. 3 credits. S-U or letter grades. M. Casasola.
Opportunity for graduate students to explore several current areas of research from both a cognitive and a social-emotional perspective. Although the traditional approach to the study of development has centered on studying cognitive development as separate from social and emotional development, the current course focuses on how cognitive and socio-emotional development are integrated and how each influences the development of the other. Thus the course is intended to provide a more integrated view of development. As one example, language acquisition, which traditionally has been viewed as a cognitive achievement, depends not only on social interactions but also on achievement in social understanding and awareness. Likewise, acquiring language that describes emotional states plays an important role in developing children's understanding of others' emotional states. Topics are determined by the interests of the graduate students who enroll.

[HD 637(6370) First-Language Acquisition]

HD 640(6400) Infancy
Fall. 3 credits. S. Robertson.
Examines development in infancy through a critical review of key research and theory in selected aspects of neurobehavior, perception, cognition, language, emotion, and social relationships. Theoretical issues considered include the role of experiences in early development, sensitive periods, continuity and discontinuity in development, and the functional significance of early behavior. Some of the conditions that put infants at risk for poor development are also considered, such as premature birth, perinatal medical complications, and exposure to environmental toxins. Combines perspectives from developmental psychology and psychobiology.

HD 651(6510) Interdisciplinary Community-Based Scientific Research in Health and Aging
Spring. 3 credits. Prerequisite: for Cornell graduate students, two semesters of graduate-level statistics. S-U grades optional. E. Wethington.
This course introduces doctoral students to the principles and practices of community-based participatory research (CBPR) in gerontology and geriatrics. The course consists of a series of expert presentations from researchers and practitioners involved in community based research projects intended to benefit older people in New York City. Individual seminar topics will range from theoretical models of different models of CBPR and other types of translational research models, methodological education, ethical issues in community-based research, specific community research projects, and funding and publication issues. A primary emphasis is on exposure to interdisciplinary activities, diverse perspectives, and values provided by researcher and community-practice presenters. Participants from diverse disciplines will collaborate in groups in order to develop a CBPR project that will be presented to the class for review.

[HD 660(6600) Social Development]

HD 666(6660) Emotions and the Brain
Spring. 3 credits. Prerequisite: HD 266. Letter grades only. R. Depue.
Concerns networks of brain regions that are organized around the integration of processes related to emotion and motivation. Explores (1) the basic brain mechanisms for recognizing and evaluating emotionally relevant stimuli; (2) the brain mechanisms involved in emotional expression, including hormonal and behavioral variables; (3) the special nature of emotional feelings. Extends all of these basic processes by placing them within larger brain networks that support phylogenetically old emotional-motivational systems that help us to adapt to critical stimuli in the environment. Neurobiological modulation of emotional processes by several neurotransmitters of wide distribution in the brain is detailed. The manner in which emotion influences learning and memory concludes the discussion. There are two take-home essay exams.

HD 674(6740) Autism Spectrum Conditions
Fall. 3 credits. Limited to 25 students. Prerequisites: graduate students in doctoral program; master's students or undergraduates doing research may apply but will be accepted only if actively involved in their own research program. S-U or letter grades. M. Belmonte.
This graduate seminar emphasizes research methodologies and the development of research proposals addressing the neuroscience of autism and other neurobiologically based developmental disorders. Topics will be selected on the basis of students' research objectives and on the basis of the experimental methods used to achieve these objectives. Techniques discussed may include functional magnetic resonance imaging, MRI morphometry, quantitative electroencephalography and event-related potentials, behavior and psychophysics, computational modeling, and diagnostic and psychometric testing. The course will commence with a discussion of participants' research interests and topics, and an overview of diagnostic criteria and other symptoms of autism spectrum conditions. Subsequent sessions will cover the Autism Diagnostic Interview–Revised, the Autism Diagnostic Observation Schedule–Generic, and the Broader Phenotype Autism Symptom Scale. Subsequent discussions will provide an overview of experimental design and anatomical and physiological measurement techniques applicable to human cognitive neuroscience, including MRI, fMRI, PET, EEG, and MEG.

[HD 686(6860) Graduate Seminar in Research Methods]

HD 687(6870) Issues in Professional Development
Spring. 3 credits. Prerequisite: at least one semester of graduate-level course work. S-U or letter grades. S. Ceci.
The goal of this seminar is to provide graduate students with essential information about professional activities that are related to careers in the academy, such as publishing in journals, applying for grants, ethical dilemmas in teaching and research, human subjects issues, academic job search issues, career milestones and evaluations, nonacademic positions, values and mores of the professoriate.

HD 691(6910) Poverty, the Life Course, and Public Policy (also DEA 691[6910])
Fall. 3 credits. Limited to 15 students. Prerequisite: graduate standing. Letter grades only. G. Evans.
For description, see DEA 691.

[HD 692(6920) Seminar in Translational Developmental Science]

HD 711(7110) Psychological Expert Testimony in the Courts (also LAW 711[7110])
Fall. 3 credits. Prerequisite: permission of instructor. S-U or letter grades. A. Mooney.
The goals of this course include (1) providing law students and graduate students with the opportunity to work together on a case in which expert testimony from a psychologist will be given, (2) increasing law students' understanding of the strengths and limitations of psychological research, psychological testing, and clinical interviewing, (3) increasing graduate students' understanding of the limits that are imposed on psychological research, testing, and interviewing when it is presented in court, (4) providing law students the opportunity to conduct an examination and a cross-examination of a psychologist expert witness, and (5) providing graduate students with the opportunity to act as an expert witness.

Individualized Special Instruction

HD 700–806(7000–8060) Special Studies for Graduate Students
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). S-U grades at discretion of instructor.
Independent advanced work by graduate students recommended by their Special Committee chair with permission of the instructor.

HD 700(7000): Directed Readings. For study that predominantly involves library research and independent study.

HD 701(7010): Empirical Research. For study that predominantly involves collection and analysis of research data.

HD 702(7020): Practicum. For study that predominantly involves field experience in community settings.

HD 703(7030): Teaching Assistantship. For students assisting faculty with instruction. Does not apply to work for which students receive financial compensation.

HD 704(7040): Research Assistantship. For students assisting faculty with research. Does not apply to work for which students receive financial compensation.

HD 705(7050): Extension Assistantship. For students assisting faculty with extension activities. Does not apply to work for which students receive financial compensation.

HD 706(7060): Supervised Teaching. 4 credits. For advanced students who assume major responsibility for teaching a course. Supervision by a faculty member is required.

HD 806(8060): Teaching Practicum. 4 credits. For advanced graduate students independently to develop and teach an undergraduate topics course under the supervision of a faculty member.

HD 899(8990) Master's Thesis and Research
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis advisor. S-U grades only.

HD 999(9990) Doctoral Thesis and Research
Fall or spring. Credit TBA; 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis advisor. S-U grades only.

POLICY ANALYSIS AND MANAGEMENT

R. Avery, chair (119A MVR, 255-2578); W. Rosen, director of undergraduate studies; D. Kenkel, director of graduate studies; W. White, director of Sloan Program; B. Hollis, executive director of Sloan Program; C. Calori, associate director of Sloan Program. Faculty: J. Allen, R. Battistella, R. Burkhauser, J. Cawley, R. Dunifon, R. Geddes, J. Gerner, J. Kuder, D. Lichter, C. Lucarelli, A. Mathio, J. Matsudaira, S. Nicholson, E. Owens, A. Parrot, E. Peters, P. Pollak, S. Sassler, K. Simon, S. Tennyson, W. Trochim, M. Waller. Emeritus faculty: J. Ziegler. Lecturers: H. Allen, T. DeLara, N. Fabrizio, J. Lewis, W. Rosen, W. Schlesinger, S. Unur, L. Vartanian.

PAM 200(2000) Intermediate Microeconomics
Fall or spring. 4 credits. Prerequisite: ECON 101 or equivalent. Students must enroll in a sec. W. Rosen, S. Unur, and staff.
Topics include theory of demand and consumer behavior including classical and indifference curve analyses; theories of production and cost; models for the following markets—competitive, monopoly, monopolistic competition, oligopoly, and inputs; general equilibrium; welfare economics; public goods; and risk.

PAM 204(2040) Economics of the Public Sector
Fall or spring. 3 credits. Prerequisite: PAM 200. S-U or letter grades. J. Lewis and staff.
The public sector now spends nearly two out of every five dollars generated as income in the U.S. economy. A thorough knowledge and understanding of this important sector is an essential part of training in policy analysis and management. This course provides an overview of the public sector of the U.S. economy, the major categories of public expenditures, and the main methods used to finance these expenditures. The principles of tax analysis and cost-benefit analysis are presented with a focus on the role of public policy in improving economic efficiency, promoting the goals of equity and social justice, and improving equity by altering the distribution of wealth and income.

PAM 210(2100) Introduction to Statistics
Fall or spring. 4 credits. J. Lewis, W. Rosen, S. Unur, and staff.
Introduces students to descriptive and inferential statistics. Topics include hypothesis testing, analysis of variance, and multiple regression. To illustrate these topics, this course examines applications of these methods in studies of child and family policy.

PAM 215(2150) Research Methods
Fall or spring. 3 credits. Prerequisite: PAM 210 or equivalent. Fall: S. Sassler; spring: M. Waller.
Students learn the logic and methods of social science research, as well as how to create researchable questions out of their issues of interest. Readings, written assignments, and in-class exercises focus on stating hypotheses, designing studies and samples to test hypotheses, measuring variables, and simple statistical analysis. PAM majors should take this course no later than their junior year.

PAM 222(2220) Controversies about Inequality (also PHIL 195[1950], SOC/D SOC 222[2220])
Spring. 1–4 credits. S. Morgan.
For description, see SOC 222.

PAM 230(2300) Introduction to Policy Analysis
Fall or spring. 4 credits. Fall: R. Avery; spring: J. Gerner.
Policy analysis is an interdisciplinary field that uses theories, concepts, and methods from disciplines such as economics, sociology, and political science to address substantive issues in the public policy arena. Students are introduced to the functions of and interactions between the major institutions (public and private) at the national, state, and local level involved in the policy making process. The course focuses on public policy analysis in the family/social welfare, health, and market regulatory areas and also includes an introduction to the technical skills required to undertake policy analysis.

PAM 310(3100) Multiple Regression Analysis
Fall or spring. 4 credits. Prerequisites: PAM 210, AEM/ILRST 210 or equivalent. Sec meets once a week. C. Lucarelli and W. Rosen.
Introduces basic econometric principles and the use of statistical procedures in empirical studies of economic models. Discusses assumptions, properties, and problems encountered in the use of multiple regression procedures. Students are required to specify, estimate, and report the results of an empirical model.

[PAM 323(3230) Consumer Behavior
Spring. 4 credits. Next offered 2008–2009. Staff.]

PAM 330 (3300) Intermediate Policy Analysis
Spring. 3 credits. J. Matsudaira.
This course examines evaluation methods used to judge whether public policies and programs are effective in achieving their goals. Policymakers are barraged with information about the likely effects of various policy changes, and need to be adept at identifying credible evidence. Building on concepts covered in introductory courses in policy

analysis, economics, and statistics, this course will aid students in becoming critical consumers of policy research and evaluations. Examples from a variety of policy areas, including education, welfare, and economic development will be explored.

PAM 333(3330) Law, Economics, and Public Policy
Fall. 3 credits. Prerequisite: ECON 101. S-U grades optional. E. Owens.
This class explores the impact of formal and informal institutions on economic transactions. Special emphasis will be placed on the development of legal institutions in the United States. Topics covered include: property rights, torts, negligence and liability, contracts and exchanges, criminal control and enforcement, equity issues in the market environment.

PAM 334(3340) Corporations, Shareholders, and Policy
Fall. 3 credits. Prerequisite: ECON 101. S-U or letter grades. R. Geddes.
Uses economic analysis to study the interaction of the market, the corporation, and the law and how these interactions affect the well-being of shareholders and consumers. Examines the costs and benefits of the corporate form of organization. The legal institutions defining the corporation, such as limited liability and shareholder voting, are analyzed along with regulations governing these institutions. A particular focus is mechanisms that control the behavior of managers. Those mechanisms include hostile takeovers, insider trading, outside directors on the board, the role of large investors, and executive compensation plans. Additional topics include government ownership of corporations and nonprofit enterprises.

[PAM 335(3350) Low-Income Families: Qualitative and Policy Perspectives
Spring. 3 credits. Next offered 2008–2009. M. Waller.]

PAM 336(3360) Evolving Families: Challenges to Family Policy (also SOC 336[3360])
Fall. 3 credits. S. Sassler.
This course examines the social institution of the family, challenges to the institution's well-being and stability, and the role of public policy in these transformations. Topics include family structure and responsibilities; marriage as a traditional building block of the family and challenges to the institution of marriage, including divorce, nonmarital childbearing, cohabitation, and same-sex unions; children, and the impact of family change on their well-being, including the effects of child poverty, maternal employment, and paternal involvement. The role of public policy in managing and shaping these developments will be discussed.

PAM 337(3370) Racial and Ethnic Differentiation (also SOC 337[3370])
Spring. 3 credits. S. Sassler.
This course provides an overview of perspectives used in sociological studies of race and ethnicity. We will read classic and contemporary research on racial and ethnic relations in the United States. The first part of the course covers a variety of theories on race/ethnic relations and addresses issues related to the social construction of race, racial identities, and the impact of immigration on racial dynamics. We next examine racial and ethnic inequality in social and demographic outcomes. The course concludes with readings that explore interracial contact and multiracial populations.

PAM 340(3400) The Economics of Consumer Policy
Fall. 4 credits. Prerequisite: PAM 200 or permission of instructor. R. Geddes.
Familiarizes students with the economic analysis of consumer policy issues. Uses the tools of microeconomic analysis to investigate the interaction between government and the marketplace, with an emphasis on how that interaction affects consumers. Examines the rationale for and effects of regulation of industry. Considers alternative theories of regulation, including the capture, economic, and public interest theories. Applies those theories to specific types of regulation, including economic regulation of specific industries (e.g., telecommunications, electricity, trucking, railroads, postal services) as well as to broader social regulation (e.g., health, safety, environmental). The effects of regulatory reform in numerous industries are also examined. An attempt is made to examine current topics relating to consumer policy.

PAM 341(3410) Economics of Consumer Law and Protection
Spring. 3 credits. Prerequisite: ECON 101 or equivalent. S-U or letter grades. J. Gerner.
Economic analysis of the roles played both by the courts and by federal and state regulatory legislation in altering consumer markets, consumer behavior, and consumer welfare. Topics include economic analyses of contract law, product liability, accident law and antitrust law, and the activities of such agencies as the Federal Trade Commission, the Food and Drug Administration, and the Consumer Product Safety Commission.

PAM 346(3460) Economics of Social Security (also ECON 447[4470])
Fall. 3 credits. Prerequisite: PAM 200 or equivalent. S-U or letter grades. R. Burkhauser.
Provides students with an economic perspective on social security policies. The readings illustrate the use of economic analysis to predict the behavioral effects and income distributional consequences of policy. Focuses primarily on the Old-Age, Survivors, and Disability Insurance Program but also discusses other programs such as the Supplemental Security Income and mandates, for example, the Americans with Disabilities Act, that affect the aged and those with disabilities.

PAM 350(3500) Contemporary Issues in Women's Health (also FGSS 350[3500])
Fall. 3–5 credits. A. Parrot.
Deals with the history of women in medicine and the historical and cultural treatment of women's health problems. Also addresses health care research and the exclusion of women from research trials and protocols. Reproductive issues, alternative approaches to treatment, medical problems, ethical issues, cancers, factors that contribute to post-traumatic stress disorders, health promotion behaviors, political issues, and routine medical recommendations are also discussed in depth. Students may take the course for a fifth credit, which requires attending a discussion section every other week and observing 12 facilities (e.g., birthing center, mammogram, and ultrasound center, wellness center, hospital labor and delivery unit, LaMaze class, women's self defense class) that provide a variety of women's health care. Some of these visits will be virtual visits available through the course web site, others will require in-person attendance.

PAM 377(3770) Child Policy
Fall. 3 credits. Prerequisites: PAM 200, PAM 310. J. Gerner. S-U or letter grades.
Topics in public policy dealing with children, with a special emphasis on the impacts of policy on child outcomes. Topics include policy affecting education attendance, high stakes testing and its impact on performance, policy impacts on family composition and change, and the effects of these on child outcomes.

PAM 380(3800) Human Sexuality
Spring. 4 credits. Limited to 150 students. Prerequisite: introductory course in human development and family studies, psychology, or sociology (or equivalent social science course). Recommended: biology course. Two 75-minute lec and one sec per week. A. Parrot.
Provides students with an understanding of the interactions and interrelationships of human behavior that influence sexual development and behavior. Focuses on the evolution of sexual norms, cross-cultural customs, legislation within changing sociopolitical systems, and delivery of services related to sexual issues, needs, and/or problems. Addresses future trends in sexuality.

PAM 382(3820) Marketing, Obesity, and the Consumer
Spring. 3 credits. S-U or letter grades. L. Vartanian.
Obesity and related negative health consequences are key public health issues, and have received a great deal of attention in both the scientific literature and in the popular media. The causes of obesity are complex, and different groups have different perspectives regarding the primary "culprits" and the primary targets of intervention. The objectives of this course are (1) to develop a better understanding of how marketing, industry, and the consumer contribute to unhealthy eating habits and obesity, and (2) to discover how a "win-win" situation is possible whereby marketing and industry can help consumers adopt healthier diet habits and healthier lifestyles. An important theme that will be addressed throughout the course relates to personal responsibility vs. corporate responsibility, a theme that is at the forefront of most political and philosophical debates on the topic of obesity. This course will emphasize critical analysis of the multiple perspectives on the obesity epidemic.

[PAM 383(3830) Social Welfare as a Social Institution
Fall. 4 credits. S-U or letter grades. Next offered 2008–2009. J. Allen.]

PAM 392(3920) New York State Government Affairs: Capital Semester in Albany (also ALS 392[3920])
Spring. 15 credits; for HE students, 7 credits count toward outside-the-major requirement; for PAM majors, credits satisfy capstone requirement and 7 additional PAM credits. Prerequisite: permission of instructor; sophomores, juniors, and seniors with minimum 2.3 GPA. W. Rosen.

Students participate in either the New York State Assembly or New York State Senate Intern Programs. Internships include research on legislation, support for legislator initiatives and public hearings, work on constituent and interest group issues, and other tasks. Students also participate in one "in-residence" course, and Cornell students also participate in a seminar conducted by W. Rosen. Students earn $3,500 stipend.

PAM 400–401–402–403(4000–4010–4020–4030) Special Studies for Undergraduates
Fall and spring. Credit TBA. S-U or letter grades. Staff.
For advanced independent study by an individual student or for study on an experimental basis with a group of students not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the department field office. This form must be signed by the instructor directing the study, the student's faculty advisor, and the department head and filed at course registration or within the change-of-registration period in the college registrar's office, 146 MVR. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department chair is necessary. Students, in consultation with their faculty supervisor, should register for one of the following subdivisions of independent study.

PAM 400(4000): Directed Readings. For study that predominantly involves library research and independent reading.

PAM 401(4010): Empirical Research. For study that predominantly involves data collection and analysis.

PAM 402(4020): Supervised Fieldwork. For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

PAM 403(4030): Teaching Apprenticeship
Prerequisite: course (or equivalent) in which student is assisting and has demonstrated high level of performance.
For study that includes assisting faculty with instruction.

PAM 406(4998) Politics and Policy: Theory, Research, and Practice (also GOVT 500[4998], ALS 500[4998], AM ST 501[4998])
Fall, spring. Taught in Washington, D.C. For description, see GOVT 500.

PAM 423(4230) Risk Management and Policy
Spring. 3 credits. Prerequisite: ECON 101 and statistics course. S. Tennyson.
Provides students with a broad understanding of risk management problems and solutions, a greater appreciation of the importance of risk and risk regulation in our society, and increased comprehension of the complexities of making decisions about risk. Topics include alternative ways to define and measure risk, the importance of risk-tradeoffs, and models of decision making under risk. With this background, alternative approaches to risk management are analyzed. The impact on risk management of the legal liability system and government programs, laws, and policies is also considered.

PAM 435(4350) The U.S. Health Care System
Spring. 3 credits. S. Nicholson.
Introduction to the U.S. health care system. Covers the interrelatedness of health services, the financing of health care, and the key stakeholders in health care delivery, including regulators, physicians, hospitals, health plans, employers, the pharmaceutical/biotech and medical device industries, and consumers. Describes the history and organization of health care, behavioral models of utilization, issues of health care reform, and current trends. Provides an overview of key policy issues, including the uninsured, the rising cost of medical care, the value of medical care, and inadequate or variable quality of care.

PAM 433(4330) Topics in Corporations and Policy
Spring. 3 credits. Prerequisite: PAM 200, PAM 310, PAM 334. S-U or letter grades. R. Geddes.
This course focuses on several current key policy issues relating to the corporate form of organization. The course format will be a mixture of lecture, discussion, and student presentations. Topics will be chosen on the basis of their relevance to corporate governance, their relationship to important policy questions, and their timeliness. The course is designed to explore in greater detail topics discussed in PAM 334 Corporations, Shareholders, and Policy that are presently in the policy arena. The number of topics is necessarily more limited. The course will explore those topics by examining recent legal, economic, and policy literature to gain a thorough understanding of each topic. One particular focus of the course will be on the differing approaches to corporate governance internationally.

PAM 437(4370) Economics of Health Policy
Spring. 3 credits. Prerequisite: ECON 101 or equivalent. S-U or letter grades. K. Simon.
Uses the economic tools of policy analysis to understand the health care system and critically evaluate current policy debates. In the past decade, some of the most controversial policies considered by state and federal governments have involved issues that have been studied by health economists and health services researchers. Uses the United States as its main institutional framework but also pays attention to health care topics of international concern, such as the AIDS epidemic.

PAM 438(4380) Economics of Public Health
Fall. 3 credits. Prerequisites: ECON 101 or equivalent. S-U or letter grades. D. Kenkel.
Uses the economic approach to study public health policies. Public health policies focus on tobacco, obesity, alcohol, illicit drugs, gun violence, sexually transmitted diseases, and other major causes of death and disease. Students will apply the concepts of market failures and the principles of cost-benefit analysis to public health problems. Students will examine how private sector advertising and public information campaigns, taxation, regulation, prohibition, and litigation affect public health. The course will also examine policies to address health disparities related to socioeconomic status.

[PAM 440(4400) Critical Perspectives
Fall. 3 credits. Next offered 2008–2009. J. Allen.]

PAM 444(4440) Violence against Women: Policy Implications and Global Perspectives (also FGSS 448[4480])
Spring. 3 credits. A. Parrot.
Focuses on the historical and current reasons for and impact of the alarming rate of violence against women both domestically and internationally. Considers the impact of legislative, public, social, or religious policies on the incidence of such violence. Considers rape, child sexual abuse, homicide, battering, hate crimes, gay bashing, kidnapping, ethnic cleansing, war crimes, forced prostitution, female genital mutilation, honor killings, public beating, lashing, stoning, torture, female infanticide, trafficking of women, forced abortions, acid attacks, sexual slavery, and sati (self-immolation). Each student is required to evaluate the impact of one current policy and critique the potential value of one pending policy relating to violence against women.

PAM 457(4570) Innovation and Entrepreneurship in the Health Care Industry
Fall. 3 credits. Prerequisite: PAM 435 or permission of instructor. J. Kuder.
Designed for students interested in the management, financing, and development of innovation in the health services industry. The unique features of the health delivery system are emphasized as students learn about developing creative approaches to health services problems. Approaches to managing change are taught with case studies from a wide range of industries. Students are taught tools for critically evaluating and implementing new business concepts in for-profit and not-for-profit firms. Both the creation of new start-up companies and innovation within exiting firms are explored.

[PAM 462(4620) The Welfare of America's Children
Spring. 3 credits. Next offered 2008–2009. J. Allen.]

[PAM 473(4730) Social Policy
Spring. 3 credits. Prerequisites: GOVT 111 or SOC/D SOC 105 or permission of instructor. S-U or letter grades. Next offered 2008–2009. J. Allen.]

PAM 498(4980) Honors Seminar
Fall. 3 credits. Prerequisites: PAM 210 and PAM 305. Letter grades only. S. Sassler.
Designed to help guide students through the development of their honors thesis. The objective of the course is to help students frame a research question that is appropriate for an honors thesis, identify an appropriate methodology to use in answering this question, identify data that can be used to answer this question, and identify literature appropriate to this question. Students will also work collaboratively in critiquing research questions and techniques to be used. Students will meet in a seminar-style class each week and will also meet with the students individually and with their research mentor throughout the semester as they work on their thesis question and methods. Students who wish to participate in the PAM Honors Program must enroll in this course during

their senior year. Students must receive a grade of B or better to continue in the Honors Program.

PAM 499(4990) Honors Program
Fall or spring. Credit TBA. Prerequisite: PAM 498. Letter grades only. PAM faculty.
Provides students with the opportunity to undertake basic or applied research that will be preparation of a thesis representing original work of publishable quality. Intended for students who desire the opportunity to extend their interests and efforts beyond the current course offerings in the department. Furthermore, the program is designed to offer the student the opportunity to work closely with a professor on a topic of interest. The number of hours of thesis credit is determined by the student's research mentor. See the director of undergraduate studies for more details.

PAM 547(5470) Microeconomics for Management and Policy
Spring. 4 credits. S-U or letter grades. W. White.
Introduces microeconomic theory and its application to decision making in the management and policy arenas. Places special emphasis on the economic environment of health care organizations and the problems faced by managers in this environment.

PAM 552(5520) Health Care Services: Consumer and Ethical Perspectives
Fall. 3–4 credits; 4-credit option may be used as Biology and Society senior seminar option. Limited to 30 students. Prerequisite: undergraduates by permission of instructor. A. Parrot.
Focuses on consumer and ethical issues faced by professionals in the health care field today. Broad topics discussed include ethical standards and guidelines, health care costs and accessibility of services, government role in health care delivery, health care as a right or privilege, private industry role in health care, services for the medically indigent and elderly, practitioner burnout and training, ethics of transplant surgery and funding, reproductive technology, AIDS research and funding, animals in medical research, right to die, and baby and granny Doe cases.

PAM 554(5540) Legal Aspects of Health Care
Spring. 3 credits. Prerequisites: PAM 557 or permission of instructor. Offered alternate years. H. Allen.
Introduces principles of the law that specifically are applicable to health-service delivery. Topics include the liability of hospitals and their staff and personnel for injuries to patients; medical records and disclosure of information; consent to medical and surgical procedures; responsibility for patients' personal property; collection of bills; medical staff privileges; and confidential communications.

[PAM 556(5560) Managed Health Delivery Systems: Primary–Ambulatory Care
Fall. 3 credits. Prerequisite: PAM 557 or permission of instructor. Next offered 2008–2009. J. Kuder.]

PAM 557(5570) Health Care Organization
Fall. 3 credits. Limited to 30 students. Prerequisite: Sloan students or permission of instructor. J. Kuder.
Graduate-level introduction to the organization of health providers in the United States, the interrelationships of health services and the major sources and methods of paying for care. Describes how health services are structured in the United States and how these different services interrelate along the continuum of care. Describes and analyzes organization, delivery, and financing issues from a variety of perspectives using specific performance criteria (e.g., equity, quality, efficiency). Also presents innovations by the public and private sectors in the delivery and reimbursement of health care.

PAM 558(5580) Field Studies in Health Administration and Planning
Fall or spring. Fall, 1 credit; spring, 3 credits; 4 total credits. Capstone course for second-year Sloan students. T. DeLara.
Students interested in developing administrative and program-planning research skills are given an opportunity to evaluate an ongoing phase of health care agency activity in the light of sound administrative practice and principles of good medical care. In planning and carrying out the research, students work closely with a skilled practicing administrator and with members of the faculty.

[PAM 559(5590) Epidemiology, Clinical Medicine, and Management Interface Issues
Spring. 3 credits. Next offered 2008–2009. Staff.]

PAM 562(5620) Health Care Financial Management I
Spring. 3 credits. S. Nicholson.
Provides a framework for evaluating how a firm should make investment and financing decisions to create value for its shareholders or stakeholders. Most of the course focuses on profit-maximizing firms, although it also discusses whether and how the investment and financing decisions are different for nonprofit firms that are prevalent in the health care industry. Therefore, this is primarily a course on general corporate finance. Specifically, the course discusses why the net present value (NPV) of discounted cash flows is the best investment criterion; calculates NPVs; derives appropriate discount rates; estimates the value of bonds, stocks, and options; and determines the optimal amount a firm should borrow. To understand how firms make investment and financing decisions, it considers how financial markets function and how investors in those markets should make decisions.

PAM 563(5630) Health Care Financial Management II
Fall. 3 credits. Prerequisite: PAM 562 or other financial management course. S. Nicholson.
Focuses on the financial analyses that managers in the health care industry use to make strategic and operating decisions. Begins by examining how health insurers design and price their products and manage enrollees' medical expenditures. Next reviews two different methods of valuing a medical product/service, and two methods of estimating the value of a company. The four valuation methods covered are: net present value of free cash flows, decision tree analysis/real options, multiples, and the venture capital method. Seven cases allow students to apply these skills to examine decisions/situations such as: determining why a Medicare HMO is losing money and recommending a redesigned benefit and reimbursement structure; estimating a health system's profitability by product line; valuing a drug that is being developed; valuing a pharmaceutical company; valuing a drug using decision-free analysis in determining whether a medical device company should go public and how it should price its products.

PAM 564(5640) Information Resources Management in Health Organizations
Fall. 3 credits. Prerequisite: strong basic computer skills. S-U or letter grades. S. Nicholson.
Exposes students to the opportunities and challenges of using information technologies (IT), such as computerized physician order entry systems, electronic medical records, medical decision support systems, handheld devices for physicians, and remote patient monitoring devices, to improve the quality of medical care and/or reduce costs. Focuses on the manager's role in the application of IT to assess and improve the quality of medical care. Students will develop a business plan for a company that uses IT to improve the quality of medical care in the U.S. health care system.

PAM 566(5660) Strategic Management and Organizational Design of Health Care Systems
Spring. 3 credits. C. Lucarelli.
Examines strategy and design issues faced by health care organizations. Topics include analysis of market conditions, organizational culture issues, development of an organizational mission and management strategy, the management of professionals, and the importance of roles, structure, and inter- and intra-institutional relationships within organizations. Taught via a case study approach.

PAM 567(5670) Health Policy
Fall. 3 credits. Prerequisite: Sloan MHA students, Ph.D. students, or permission of instructor. K. Simon.
Addresses major health policy issues and the critical processes that influence them. Focuses primarily on the United States, with some coverage of health policy in other countries. Topics include Medicare, Medicaid, the uninsured, public health, the effect of welfare policy on health care, managed care development and regulation, state and federal health care reform, and many others. The course analyzes the politics of health policy in terms of legislative and executive processes; the forces involved including economic, social, ethical, and political factors; and key players in health policy, such as special interest groups, public agencies, and elected officials.

PAM 569(5690) Regression Analysis and Managerial Forecasting
Fall. 3 credits. Prerequisite: at least one statistics course. C. Lucarelli.
Teaches various statistical methods for managerial decision making, with a particular emphasis on regression and forecasting. Other topics include ANOVA, correlation, confounding, interaction, and statistical process control. Emphasizes applications to health care organizations.

PAM 570(5700) Health Care Accounting
Fall. 4 credits. Core course for Sloan MHA students. W. Schlesinger.
Introduces the basic concepts of financial and managerial accounting with emphasis on health care applications. Explains the measurement system of business operations, business valuation, financial reporting, budgeting, cost allocation, service and product

costing, and special reports for managerial use. Ethical and international issues are integrated throughout the course materials with real world applications. At the conclusion of the course, students should be able to read, understand, and analyze the annual financial reports of an organization. Collaborative learning, cases, discussions, readings, researches, presentation, speakers, problem solving, videotapes, and lectures are used as teaching pedagogy.

PAM 571(5710) Organizational Development/Human Resource Management in Health Care Organization

Fall. 3 credits. Prerequisite: graduate standing. N. Fabrizio.

Explores (1) the theoretical foundation of organizational theory, research, and human resource management with an emphasis on implementation; (2) real-world problems while analyzing, exploring, and discussing varied interpretations of selected cases; (3) the building blocks of managerial activity; internal organizational issues; performance issues related to organization design; and strategic issues. Key organizational change and development concepts enhance students' perspectives on how the theories, strategies, and practices relate to today's organizations. The course serves as a framework to establish the theory and both the conceptual and competency foundations necessary for applying interventions.

[PAM 572(5720) Economic Evaluations in Health Care

Fall. 3 credits. Recommended: background in microeconomics and statistical tools. S-U or letter grades. Next offered 2008–2009. D. Kenkel.]

PAM 574(5740) Short Course in Fundamentals of Health Facility Planning for Managers

Spring. 1 credit. B. Hollis.

Provides MHA and other students who may be interested in careers in health care management with a basic familiarity regarding some of the concepts and terminology related to health facility planning projects. The course will touch on areas that a manager might encounter, including working with designers, the relationship between strategic planning issues and facility planning, basic cost estimating techniques, simplified plan interpretation, and use of architectural and engineering scales. The course will have two primary components. One portion will be lectures and hands-on demonstrations on plan reading/measurements and an overview of the process of project planning. We anticipate a tour of an active or recently completed project at either Cornell or Cayuga Medical Center as time allows. The other will involve live or videoconference presentations from invited practitioners and researchers in the health facilities area.

PAM 576(5760) Long-Term Care and Lifestyle Alternatives for the Older Adult

Spring. 1 credit. M. Weidner.

Provides students exposure to, and fosters critical thinking about, policy and operational issues related to health care and living alternatives for the well, near frail, and frail older adult. Preliminary readings will introduce the student to societal issues of the aging, clinical issues facing the older adult, and management operations for nursing homes, independent living communities, assisted living, and home care. Emphasis will be placed on student interaction with instructors and other seminar participants regarding society and management issues. Case studies will be used to enhance student interaction and participation.

PAM 577(5570) Marketing for Health Care Managers

Fall. 3 credits. Prerequisites: microeconomics and permission of instructor. D. Perosio.

Introduces students to the substantive and procedural aspects of marketing strategy and management. The course is designed to convey the key concepts of marketing and how they fit into the larger context of overall management strategy and decisions. Both the practical "how" and the fundamental "why" of marketing activities will be explored. Course examples rely heavily on actual situations and experiences in the health care industry. Students will apply their knowledge of marketing and health care management to the development of a marketing plan.

PAM 581(5810) Measuring and Evaluating Health Program Performance and Quality

Spring. 3 credits. Prerequisites: PAM 557 and a basic multivariate statistics course or permission of instructor. S-U or letter grades. J. Kuder.

This course is designed for policy makers, health systems managers, and beginning health services researchers that want an applied introduction to using health system evaluation tools and literature to enhance system and program performance and improve quality.

PAM 600(6000) Special Problems for Graduate Students

Fall and spring. Credit TBA. S-U or letter grades. Staff.

Independent advanced work by graduate students recommended by their chair and approved by the department chair and the instructor.

PAM 603(6030) Experimental, Quasi-Experimental, and Economic Evaluation Methods

Spring. 3 credits. Highly recommended: background in statistics (e.g., AEM 710 or equivalent) and microeconomics (e.g., PAM 200 or ECON 639). J. Matsudeira.

Focuses on quantitative methods of policy analysis and program evaluation, with an emphasis on those programs and policies that are related to health, family, and consumer issues. The first part of the course covers experimental design and methods of making causal inferences from non-experimental data. The second part covers benefit-cost analysis, explicitly incorporating both equity and efficiency considerations. Throughout the course attention is paid to the role of economic modeling in program evaluation, including the role of structural theoretical models and general equilibrium analysis.

PAM 604(6040) Qualitative, Survey, and Mixed-Method Approaches to Policy Research

Spring. 3 credits. Prerequisite: Ph.D. students. Highly recommended: previous course in social science research methods. M. Waller.

Introduces students to theories and methods of data collection techniques such as in-depth interviews, ethnography, focus groups, and surveys as well as mixed-method approaches used in policy and evaluation research. Addresses the strengths and weaknesses of various methods and the design of qualitative and mixed-method studies. Covers epistemology, ethics, induction and deduction, measurement, validity, and triangulation. Also discusses more concrete issues such as gaining access to a field site, developing a qualitative interview guide and survey questionnaire, conducting a qualitative interview, managing data, and assessing data quality.

[PAM 605(6050) Economics of Family Policy

Fall. 3 credits. Prerequisite: PAM 639 or ECON 609 or permission of instructor. S-U or letter grades. Next offered 2008–2009. Staff.]

PAM 606(6060) Demographic Techniques (also D SOC 608[6080])

Spring. 3 credits. S-U or letter grades. D. Gurak and D. Lichter.

For description, see D SOC 608.

PAM 608(6080) Economics of Consumer Demand (also AEM 670[6700])

Fall. 3 credits. Prerequisite: PAM 200, ECON 313, or concurrent enrollment in one of those, and two semesters of calculus. S-U or letter grades. C. Ranney.

For description, see AEM 670.

PAM 631(6310) Ethics, Public Policy in American Society

Fall. 3 credits. Prerequisite: senior or graduate standing. J. Ziegler.

Explores current issues of ethics and public policy against a background of theories of ethical behavior. Examines questions of how public officials and managers of public and nonprofit agencies and private enterprises act. How do standards of ethical behavior in the professions get established? How are public policy issues with ethical implications resolved? Readings are drawn from political philosophy, contemporary social science, and imaginative writing. Class participation is essential.

[PAM 632(6320) The Intergovernmental System: Analysis of Current Policy Issues

Fall. 3 credits. Prerequisite: graduate students or seniors who have had course in American government. Next offered 2008–2009. J. Ziegler.]

[PAM 633(6330) Seminar in Pharmaceutical Policy Issues

Fall. 2 credits. Meets once a week. S-U or letter grades. Next offered 2008–2009. S. Tennyson.]

[PAM 639(6390) Microeconomics for Policy Analysis

Fall. 4 credits. Prerequisites: intermediate economics and calculus course; Ph.D. students; undergraduates by permission of instructor. Next offered 2008–2009. J. Cawley.]

PAM 640(6400) Consumers, Information, and Regulatory Policy

Spring. 3 credits. Prerequisites: PAM 639 or calculus and intermediate microeconomics. S. Tennyson.

Examines information problems in markets and how they affect consumers, focusing on market mechanisms and regulatory actions

that address those information problems. Major theoretical topics include price and quality uncertainty, moral hazard, adverse selection, and principal-agency theory. The course gives an overview of market mechanisms that deal with information issues such as marketing, advertising, warranties, third-party certification, licensing, and self regulation; the major regulatory institutions that govern consumer policy including the Food and Drug Administration and the Federal Trade Commission; and the way the legal system provides consumer protection. The market for pharmaceuticals is a particular focus. Primary reading material is drawn from economics and policy journals, and papers from the *Journal of Public Policy and Marketing*.

PAM 691(6910) Health Economics I (also ECON 691[6910])
Spring. 3 credits. First course in Ph.D.-level health economics sequence. Prerequisites: Ph.D.-level courses in microeconomic theory and econometrics. Staff.
Comprehensive course covering micro-economic theory and its application to health and health care markets. Topics include consumer decision making, the theory of the firm, welfare economics, monopolies and oligopolies, and market imperfections. Applications in health economics include the demand for health, rational addiction, the industrial organization of health care, cost-effectiveness analysis, price discrimination by health care providers, how consumers respond to information about health care, adverse selection in health insurance, and the moral hazard created by physician compensation strategies. Each student writes a research paper, testing predictions from microeconomic theory by acquiring suitable data and estimating the appropriate econometric model, and presents his or her findings in a research seminar.

PAM 692(6920) Health Economics II
Fall. 3 credits. Prerequisites: Ph.D.-level courses in microeconomic theory and econometrics. D. Kenkel.
Covers microeconomic theory and its applications to health and health care markets. Topics include consumer demand for health and health behaviors, the supply side of health promotion, the industrial organization of health care, and cost-benefit and cost-effectiveness analysis of health interventions. Second course in Ph.D.-level health economics sequence, but the courses may be taken in any order.

PAM 760(7600) Challenges and Trends in the Health Services Industry
Fall and spring. 1 credit. Prerequisite: graduate standing or permission of instructor. S-U grades only. W. White.
Provides students with information and exposure to current and emerging issues in the health services industry. Topics may include financial management of health care facilities, human resource management, information systems, cost-effective clinical decision making, quality measurement and outcomes, public health, and entrepreneurship in the health services industry.

PAM 899(8990) Master's Thesis and Research
Fall and spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S-U or letter grades.

PAM 999(9990) Doctoral Thesis and Research
Fall and spring. Credit TBA. Prerequisite: permission of graduate committee chair and instructor. S-U or letter grades.

FACULTY ROSTER

Allen, Henry, J.D., Cornell U. Lec., Policy Analysis and Management
Allen, Josephine A., Ph.D., U. of Michigan. Assoc. Prof., Policy Analysis and Management
Ashdown, Susan, Ph.D., U. of Minnesota. Assoc. Prof., Fiber Science & Apparel Design
Avery, Rosemary J., Ph.D., Ohio State U. Prof. and Chair, Policy Analysis and Management
Battistella, Roger M., Ph.D., U. of Michigan. Prof., Policy Analysis and Management
Becker, Franklin D., Ph.D., U. of California, Davis. Prof. and Chair, Design and Environmental Analysis
Belmonte, Matthew, Ph.D., Boston U. Asst. Prof., Human Development
Brainerd, Charles, Ph.D., Michigan State U. Prof., Human Development
Burkhauser, Richard, Ph.D., U. of Chicago. Prof., Policy Analysis and Management
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Depue, Richard, Ph.D., U. of Oklahoma. Prof., Human Development
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Elliott, John, M.E. Des., U. of Calgary (Canada). Assoc. Prof., Design and Environmental Analysis
Eshelman, Paul E., M.F.A., U. of Illinois. Prof., Design and Environmental Analysis
Evans, Gary, Ph.D., U. of Massachusetts, Amherst. Prof., Design and Environmental Analysis
Frey, Margaret, Ph.D., North Carolina State U. Asst. Prof., Fiber Science & Apparel Design
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Gibson, Kathleen J., M.A., Ohio State U. Assoc. Prof., Design and Environmental Analysis
Hamilton, Stephen F., Ed.D., Harvard U. Prof., Human Development, Co-Director, Family Life Development Center
Hazan, Cindy, Ph.D., U. of Denver. Assoc. Prof., Human Development
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Kuder, John, Ph.D., U. of Michigan. Assoc. Prof., Policy Analysis and Management
Laquatra, Joseph Jr., Ph.D., Cornell U. Prof., Design and Environmental Analysis
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Loker, Suzanne, Ph.D., Kansas State U. Prof., Fiber Science & Apparel Design
Lucarelli, Claudio, Ph.D., U. of Pennsylvania. Asst. Prof., Policy Analysis and Management
Lust, Barbara C., Ph.D., City U. of New York. Prof., Human Development
Mathios, Alan, Ph.D., U. of Pennsylvania. Prof., Policy Analysis and Management; Assoc. Dean
Matsudaira, Jordan, Ph.D., U. of Michigan. Asst. Prof., Policy Analysis and Management
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Mete, Fatma, Ph.D., U. of Leeds (UK). Assoc. Prof., Fiber Science & Apparel Design
Mikels, Joseph A., Ph.D., U. of Michigan. Asst. Prof., Human Development
Netravali, Anil, Ph.D., North Carolina State U. Prof., Fiber Science & Apparel Design
Nicholson, Sean, Ph.D., U. of Wisconsin, Madison. Assoc. Prof., Policy Analysis and Management
Obendorf, Sharon K., Ph.D., Cornell U. Prof., Fiber Science & Apparel Design, Assoc. Dean
Ong, Anthony D., Ph.D., U. of Southern California. Asst. Prof., Human Development
Owens, Emily, Ph.D., U. of Maryland. Asst. Prof., Policy Analysis and Management
Parrot, Andrea, Ph.D., Cornell U. Prof., Policy Analysis and Management
Perosio, Debra, Ph.D., Cornell U., Lec., Policy Analysis and Management
Peters, H. Elizabeth, Ph.D., U. of Chicago. Prof., Policy Analysis and Management
Pillemer, Karl A., Ph.D., Brandeis U. Prof., Human Development
Pollak, Patricia B., Ph.D., Syracuse U. Assoc. Prof., Policy Analysis and Management
Reyna, Valerie, Ph.D., Rockefeller U. Prof., Human Development
Robertson, Steven S., Ph.D., Cornell U. Prof., Human Development
Sassler, Sharon, Ph.D., Brown U. Assoc. Prof., Policy Analysis and Management
Savin-Williams, Ritch C., Ph.D., U. of Chicago. Prof. and Chair, Human Development
Simon, Kosali, Ph.D., U. of Maryland. Asst. Prof., Policy Analysis and Management
Sims, William R., Ph.D., Massachusetts Inst. of Technology. Prof., Design and Environmental Analysis
Tennyson, Sharon, Ph.D., Northwestern U. Assoc. Prof., Policy Analysis and Management

Trochim, William M. K., Ph.D., Northwestern U. Prof., Policy Analysis and Management
Vartanian, Lenny, Ph.D., U. of Toronto, Lec., Policy Analysis and Management
Waller, Maureen R., Ph.D., Princeton U. Asst. Prof., Policy Analysis and Management
Wang, Q. I., Ph.D., Harvard U. Asst. Prof., Human Development
Weidner, Michael, M.B.A., Cornell U., Lec., Policy Analysis and Management
Wells, Nancy, Ph.D., U. of Michigan. Asst. Prof., Design and Environmental Analysis
Wethington, Elaine, Ph.D., U. of Michigan. Assoc. Prof., Human Development
White, William, Ph.D., Harvard U. Prof., Policy Analysis and Management
Williams, Wendy M., Ph.D., Yale U. Assoc. Prof., Human Development

Lecturers

Allen, Henry, J.D., Cornell. U. Lec, Policy Analysis and Management
Basinger, Annette, B.A., Michigan State U. Lec., Design and Environmental Analysis
Beck, Sam N., Ph.D., U. of Massachusetts. Sr. Lec., Urban Semester
Breen, Nancy, Ph.D., Syracuse U. Lec., Fiber Science & Apparel Design
Curtis, Steven H., B.A., Syracuse U. Lec., Design and Environmental Analysis
DeLara, Thomas, M.B.A., Barry U. Lec., Policy Analysis and Management
Fabrizio, Nick, Ph.D., Walden U. Lec., Policy Analysis and Management
Gilmore, Rhonda, M.A., Cornell U. Lec., Design and Environmental Analysis
Hollis, R. Brooke, M.B.A., Cornell U. Lec, Policy Analysis and Management
Lewis, Jeffrey, Ph.D., U. of Maryland, College Park. Lec., Policy Analysis and management
Perosio, Debra, Ph.D., Cornell U. Lec, Policy Analysis and Management
Racine, Anita, Ph.D., Cornell U. Sr. Lec., Fiber Science & Apparel Design
Rosen, William, Ph.D., U. of California. Sr. Lec., Policy Analysis and Management
Ross-Bernstein, Judith, M.Ed., Northwestern U. Sr. Lec., Human Development
Schelhas-Miller, Christine, Ed.D., Harvard U. Sr. Lec., Human Development
Schlesinger, Warren, M.B.A., Cornell U. Lec., Policy Analysis and Management
Unur, Ali Sinan, Ph.D., Cornell U. Lec., Policy Analysis and Management
Vartanian, Lenny, Ph.D., U. of Toronto. Lec, Policy Analysis and Management
Weidner, Michael, M.B., Cornell U. Lec, Policy Analysis and Management